June, 1993 - Volume 10, No 6

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The Australian COMMODORE & AMIGA Review

Aladdin 4D

Animation without the wait.

PageStream 3.0 - What's New? · Animworks
Solving Those Disk Swapping Blues · Games

Registered by Australia Post Publication No. NBG 6656

* Recommended Retail Price

AMIGA 1200

THE BEST OF ALL WORLDS

USING AMIGAS

Amigas let you decide how you use them. You can use the point and click system, which we call Workbench, or you can type commands on the keyboard as on MS-DOS computers. Most people prefer Workbench, it is easy to learn and great fun to customise. With Workbench you move the pointer around the screen withthe mouse and click on little pictures called icons, these represent functions you want your Amiga to do.

All Amigas can run several programs at once: so you can print a letter, sort names and address lists, listen to some music and play with a paint program all at the same time.

You can also exchange data with MS-DOS machines simply by putting the disk in the drive. Workbench will even give you an icon to make things easier.

Most Amiga programs use a universal file format called IFF. This allows one program to use another's data, for example, a Word Processor can use a picture created in a drawing program.

Even the software you buy for your Amiga will be easy to use and great value for money, just like the computer itself.

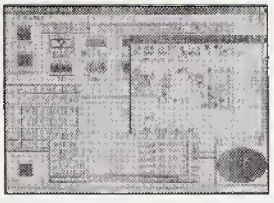
AMIGA SPECIALITIES

The Amiga is a great tool for work and pleasure but it excels at:

- Anything to do with graphics or video. Being video compatible means that the picture can be displayed on a T.V. or recorded on video. Having a graphics co-processor makes the action fast, whether you are reading through a large report or playing a super-action game.

- Built in digital stereo sound on the Amiga gives you concert quality reproduction. With an inexpensive add-on you can even digitise your own audio and then experiment with it on the screen.

- With the addition of optional emulators, the Amiga can also run MS-DOS * or Macintosh * software - giving you the best of all worlds.



Commodore

For a supplier near you call (008) 805 067 (outside Sydney metro area) or (02) 428 7666.

Contents

Vol 10 No 6 - June 1993

3D Animation with Aladdin

18

Easy for beginners, Aladdin gives good end results without the long waiting usual with this type of program

The Animation Workshop

26

The answer to every Amiga animator's dream - Cut, Splice, Scale, Delay in a mouse click

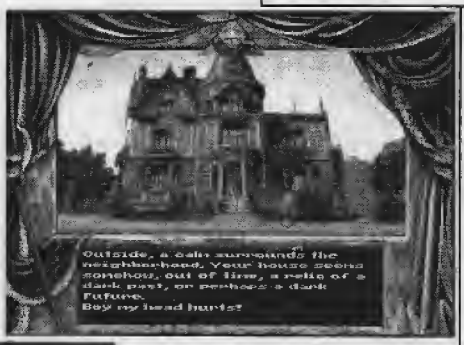
14 New Releases for World of Commodore

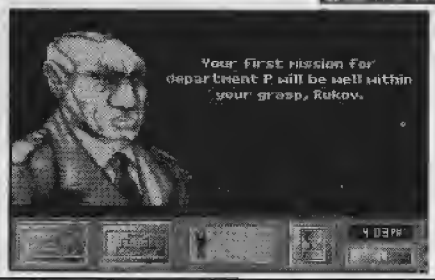
22 How to Beat those Disk Swapping Blues

ENTERTAINMENT

65 That's Entertainment
- News, hints & tips, letters, Hall of Fame

68 Game Reviews
- KGB, Fate - Gates of Dawn, Darkseed, Civilisation





74 King's Quest
- Full solution - Part 1

76 Adventurers' Realm
- Hints & Tips, Trading Post, Problems, Clever Contacts, The Dungeon

Regulars

4 Ram Rumbles
6 Notepad
31 Deluxe Paint Tutorial
- Animating in (apparent) 3D
36 Amos Column
- Interview with Francois Lionet
42 Andy's Attic - Exploring WB2
45 You Can CanDo
- Your own Directory Utilities Part 2
48 Education Column
- World Construction Set
52 Down the Opal Mine -
- Using the Alpha channel
54 C64 Column
- Which 128 WP, For Sale
56 Hot PD - Latest Public Domain

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Advertiser's Index

Allens	33	Commodore	IFC, IBC, 70, 71	G-Soft	8	Power Peripherals	3, 5, 7, 9, 51, 63
Amadeus Computer	29	Computer Man	2	HC Software	64	Prime Artifax	60, 61
Amitech	40, 41	Computa Magic	27	Hargware	58	Quadrant	59
AmigaP/D Ctr	57	Computer Outpost	21	Logico	13	Rod Irving	57
Amiganuts	64	Gary Dellar	57	Megadisc	53	Scarlet	57
BitMaster	57	Desktop Utilities	15	MVB	10, 11	Sigmacom	34, 35
Brunswick	57	Don Quixote	23	OpalVision	17	Solutions Rendered	37
CPA	25	Egghead	19	Pactronics	4	TupSoft	12
Clip Art Collection	57	Electronic Design	OBC	Parcom	64	Unitech Electronics	15
Code One	55	Fonhof	58	Pelham	57	Wall Street Video	59
Colour Comp Sys	50			Phoenix	47		

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You never know how low I will go

Computer Man

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Editorial

Another financial year comes to a grinding halt - and *Professional Calc 2.0* has arrived just in time to calculate my tax return. But there's no time! There is too much news in Amiga land to sift through. But is it truthful? Can the rumours be trusted?

What of the Amiga 5000 with its dual '040 coprocessor and 68060 CPU? If you have not heard this rumour by now, relax. We've checked out the original document on which the information is based. There can be no doubt it is a fantasy of unlikely and fictitious information compiled to entertain on April Fool's day. The aforementioned document has been doing the rounds ever since. There is no such beast as the Amiga 5000.

Commodore have ceased manufacturing all of the old Amigas. The Amiga 500, 2000 and 3000 have now been completely replaced by the 600, 1200 and 4000. This is a good thing. Progress is the life blood of any good company. No one will argue that the Commodore mothership was starting to fall from orbit. The arrival of the new Amigas was not a moment too soon and early sales indications are that the A1200 is a big winner.

And the best is yet to come. There are strong rumours Commodore are preparing to expand their range of products in two directions. New high end Amigas are in development now. The AAA chip-set as it is currently known boasts more astounding improvements. Expect to see announcements in mid '94 regarding the next generation of power machines.

At the bottom end, Commodore must be feeling the pinch from Sega and Nintendo. But not for much longer. There is increasing reason to believe an Amiga based games console will arrive very soon. When that happens, Commodore should be able to deliver a firm punch to the game market. The sooner the better, I say.

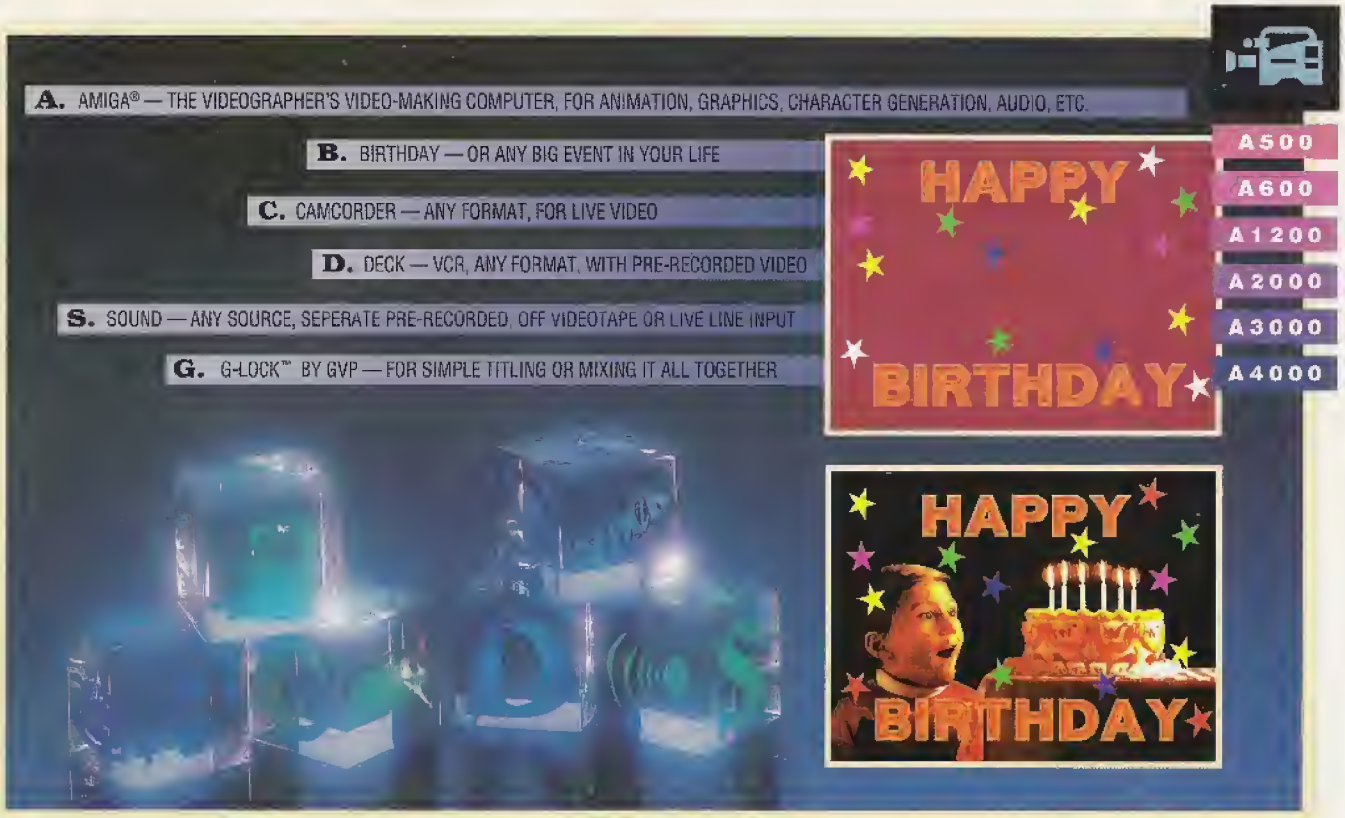
Looking to the future, there are some exciting products surfacing. *Real3D 2.0* has arrived and is set to turn the 3D animation world on end. The power this program offers approaches that available on software costing tens of thousands of dollars on other platforms.

Pagestream 3.0 sounds absolutely amazing - everything *Quark Express* is and then some. Version 3.0 is a brand new program, not an upgrade. Release is slated for the last half of this year. Other developers have improvements and upgrades planned for existing major products - including top line wordprocessors and paint programs.

With World of Commodore just around the corner, there's going to be lots of new goodies to look at over coming months. So, be sure not to miss an issue - there's bound to be plenty of new gear reviewed every month. We've also tapped into an excellent number of new sources of news for the Amiga - so check out Notepad for all the latest information.

See you at World of Commodore next month!

Andrew Farrell



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G-Lock™ Makes Your Video Connections With:

- Genlock features for crisp overlays of scrolling, or static titles, graphics over live video and recording to videotape with high quality results.
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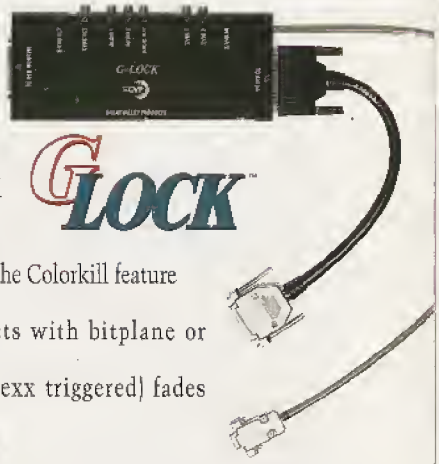

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Audio: Sound Designs

G-Lock's dual-input audio panel switches, mixes and shapes sound for effects such as ...

- Combining stereo channels or separate inputs without a "Y" adaptor.
- Treble and bass equalization.
- Plus, add DSS8 or any Amiga created/modified digital audio samples to your final mix!

Professional video processing + audio processing + a powerful but simple interface + creative special effects, make G-Lock the cornerstone of your multimedia productions!

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UPDATE COLUMN

Great news for parents with young children! We now have a range of educational products for the Amiga called ADI JNR. At the moment there are two programs, Counting and Reading. In both cases they are for age groups 5-6 or 6-7 and they are an ideal way to get your child happily playing on the Amiga whilst learning at the same time. The Reading package teaches the child to associate sounds with letters and to recognise harder sounds; reading and spelling of harder works; listening skills; memory and observation skills. The Counting package teaches reading and recognising numbers of things; sorting numbers into right order; painting by numbers; adding and subtracting; pattern matching; observation and memory skills. Children can also use ADI JNR as their guide learning to draw, paint, tell the time, etc. These products have been prepared following extensive research by educationalists and psychologists.

For the AMOS user. Amos Pro Updater V1.2 and the Amos Pro Compiler should be released 24th June. Amos the Creator V1.36 and the Compiler 1.36 are now available as is the Object Modeller which will run under Workbench 2 or Workbench 3. These are available as upgrades. You need to send in $5 with your name and address asking for the particular package you would like.

THIS MONTH'S "SPECIALS"

FUN SCHOOL 2 ages 2-6; 6-8; 8+ normally $29.95	$20.00
FUN SCHOOL 3 ages -5; 5-7; 7+ normally $59.95	$35.00
1Mb RAM EXPANSION FOR A600 normally $159.00	$110.00
RODY & MASTICO normally $39.95	$25.00
MUGICIAN normally $59.95	$40.00

Finally, let me remind you of our great range of Amiga books ranging from "Amiga for Beginners" up to "Advanced System Programming" and just about everything for your computer and software in between. Please ring for list and special book prices on (02) 748 4700.

Pactronics Pty Ltd, 98 Carnarvon St, Silverwater, NSW (02) 748 4700

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Ram Rumbles

Amazing Stories: A600 Survives Plane Crash!

Yes folks, read it and be amazed. The following letter was too good to hold over for one more month. Here follows an amazing story of the fate of an Amiga 600.

"I am writing to inform you of an incident that involved my Amiga 600HD recently. The incident of which I speak, I'm sure you'll agree, will amuse you and is a credit to Commodore.

"While travelling to Perth, from Brisbane, my plane was scheduled to stop over in Melbourne. I was planning to spend three weeks holiday over the Christmas period in sunny Perth, occasionally doing some programming on my Amiga. However it seemed a higher power had other plans. Shortly after landing in Melbourne airport I was paged to the baggage claims office, where I was greeted by a worried looking woman.

"I'm afraid I have some disturbing news," she announced. Before me on a counter lay shreds of luggage, plastic keys and assorted mutilated Christmas presents. Still in confusion and possibly shock-induced denial, I asked the woman what was it that she wanted.

"I am not sure to this day as to the events that led to my computer's destruction but they appear irrelevant when compared with the actual act. The only witness, a baggage handler of impeccable rectitude, explained that although my bag was placed on the luggage trolley it must have dislodged itself along the journey to the terminal. The bag in question was dragged some hundred metres along the ground where it was left defenceless on the perilous tarmac.

"My computer and the contents of the bag, was somehow in direct line with the flight path of an incoming 727. I am unaware as to whether the pilot deliberately swerved to hit my bag or if it was just a good shot but my leather diary now boasts tyre marks on its cover.

"The airline in question was more than apologetic, swearing that they would compensate me for any loss incurred. I looked at the several parts of my computer that littered the length of the counter and nodded in the affirmative. A small plastic bag contained several keys, the hard drive sat in another with the keyboard and the disk drive looked as though it could fit 5 1/4 inch disks.

"I returned to Perth amused at my fate, it is not everyone who can claim my circumstances. However it was not until several days later did I try to resolve it. The motherboard was cracked where the disk drive had attempted to pass through it and the plastic casing had assumed some form of complex three dimensional abstract form. The hard drive attached rather well but I was unaware as to the effect a large object like a 727 would have on its data, I hazardously guessed it would be somewhat detrimental.

"I bridged over the cracked tracks with wire, replaced the old disk drive, which now would probably read CD ROMs, with an old external drive, encased the pieces in a perspex case and connected the rubble to the power. The finished product looked like something from *The Time Tunnel* only with less flashing lights.

"When I first saw the Amiga 600HD I was amazed at what this 'keyboard with a CPU' could do. It was perfect for my study, small and compact yet powerful enough to be used to develop serious software on. I am studying computer engineering and this machine is ideal for me.

"I did not in my wildest dreams think that an instrument of this nature could survive such an attempted annihilation. Not only did the hard drive work and recall all my data, but the rest of the machine worked perfectly. I have to buy another internal disk drive, and mount the electronics in a new case but apart from that I still have a working machine.

"I feel this is a credit to Commodore's engineers in designing such a sturdy piece of equipment. Although an extreme example, I am sure this factor is appreciated by anyone who has ever dropped, bumped or fallen asleep on the keyboard. I am saving to buy the A1200 now when it is released."

Paul Nevin, Esperance WA

SCALA

Everybody's talking multimedia revolution.
Allow us to light the fuse.

MM2II Shipping
Full AGA Support

A lot of apples were bruised when we first introduced Scala, the professional presentation package.
With the new Scala MultiMedia MM200, they will be blown into oblivion!

Let us introduce a few of the features that make Scala MM200 combined with the Amiga the world's most powerful multimedia environment:

Scala EX
A revolutionary new plug & play system, for the integration of laserdisk, still video, MIDI, or CDTV sound in your Scala presentation. Extra EX'es, such as 24 bit graphic support and VCR control are also available.

Scala Wipes
More than 80 amazing, smooth and professional transitions provide possibilities previously unseen on the Amiga.

Scala Sound
Enhance your presentations with voice-over, music and special sound effects! Scala offers total control of recording and play-back.

Scala Shuffler
Instant viewing of your whole presentation! You can see up to 112 pages at one time. Simply shuffle them around with the mouse!

Scala Snapload
A series of advanced techniques make Scala load and display pictures and animations faster than any other package!

Scala Buttons
Creating interactive hotspots has never been so easy! Scala MM200 even includes full support of variables.

Scala LINGUA
The multimedia language Lingua with its close link to ARexx puts the advanced user in total control!

AnimLab
With this bonus program you can make your animations play up to four times faster!

The press writes:
"The word multimedia has been battered and misused... Scala on the other hand, know exactly what multimedia is and what to do with it!" *Amiga User International (UK)*

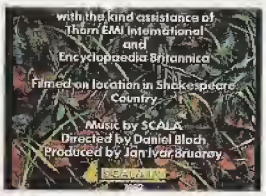
"...the best program in show business." *Amiga Format (UK)*

"Scala MM200 is the kind of software that many serious users simply cant't afford to be without." *Amiga Computing (UK)*

Scala MM200
— for video titling, training, business presentations, interactive use — or any multimedia combination.

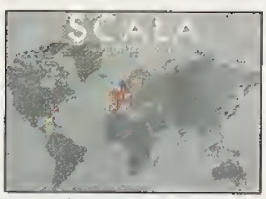
For a close look at the market leader in multimedia software, contact your dealer today!

The Scala main menu.

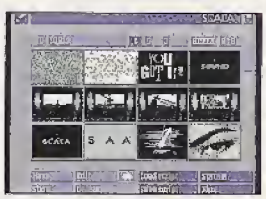


Scroll text by Scala.

The Scala edit menu.



It's a Scala world!



The Scala Shuffler.

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SCALA
Why make it harder?

NOTEPAD

New Super Power Processor

Motorola has been quietly working on a powerful successor to the 68040, the 68060, that will perform in the range of 100 million instructions per second (MIPS), compared with the 29 MIPS of a 68040 with a 33MHz clock rate.

The 68060 employs super-scalar execution, that is, the ability to perform two instructions per clock cycle. Motorola plans volume shipments of a 50MHz 68060 in early 1994, with a 66MHz chip to follow. Motorola skipped development of a 68050 in favour of the more radical 68060 design.

Imagemaster 9.5 Upgrade!

Black Belt Systems is in the process of releasing a major new upgrade to *Imagemaster*, designated version 9.50.

New features include support for selected Epson flatbed scanner models, standard with the upgrade or release. Includes ES300, ES600 and ES800. (They can provide prewired cables, also). This scanner support is based on the Metadigm "Metascan" product, an integrated version of which is now supplied with *Imagemaster*. (If you own the ASDG scanner driver, you can use that cable with the new driver - or, they have optional cables available for purchase).

Aspect sense; determines the exact aspect of the monitor/mode combo simply, easily and in a foolproof manner. Even takes into account any distortions introduced by monitor width/height settings.

Exact Aspect display mode; aspect ratio correct display capability. This, in combination with Aspect Sense, allows you to see and work on images exactly as they are intended to appear.

Supports AGA 800x600 for work and render output.

New image and ANIM file format support:

- Reads IFF images from the Amiga ClipBoard device, Writes IFF images to the Amiga ClipBoard device,
- Reads ALL kinds of TIFF image files (in both IBM and Mac formats),
- Writes 24-bit TIFF files,
- Reads *Windows* BMP image files
- Writes *Windows* BMP image files,
- Reads AGA mode ANIM frames
- Generates AGA mode ANIMS,
- Reads frames from Autodesk FLI/FLC Animation files (IBM PC format),
- Writes AutoDesk FLI/FLC animation files
- Reads *MacPaint* files,
- Reads NoteBook files,
- Reads Amiga .info files,
- Reads 12-bit General Electric MRI (Magnetic Resonance Imaging) files,
- Reads PCX files,
- Reads WinImages:morph 24-bit filmstrip files.

Comic Relief

NEW VIRUS STRAINS DETECTED

compiled by Lloyd E. Pulley, Sr.

Politically Correct Virus:

Never calls itself a "virus," but instead refers to itself as an "electronic microorganism." Infected computers immediately stop processing and display "computationally challenged" as an error message.

Government Economist Virus:

Nothing works, but all your diagnostic software says everything is fine.

Congressional Virus:

Especially insidious, this virus comes in two versions, each version replacing the other at random intervals.

Under Version 1, the computer locks up, screen splits erratically with a message appearing in each half blaming the other side for the problem. Version 2 runs every program on the hard drive simultaneously, but doesn't allow the user to accomplish anything.

Federal Bureaucrat Virus:

Divides your hard drive into hundreds of little units, each of which does practically nothing but all of which claim to be the most important part of the computer and therefore requires additional resources. When detected, attempts to invoke Version 2 of the Congressional virus.

Federal Budget Virus:

Attempts to allocate non-existent resources to hard drive partitions created by the Bureaucrat virus. Upon failing, passes control to the IRS virus which locks up the entire computer and seizes its assets.

Airline Virus:

You're in Sydney, but your data is in Melbourne.

Kervorkian Virus:

Helps your computer shut down whenever it wants to.

Paul Revere Virus:

This revolutionary virus warns you of impending attack — once if by LAN, twice if by C.

PHOTO COURTESY OF NASA

ROCKET SCIENCE MADE SIMPLE

...HIGH FLIER VERSUS "SOME ASSEMBLY REQUIRED"

Some 24 bit video boards make you pay your money and take your chances. You take a chance that they'll be up and flying in the future. You take another chance that all the "enhancements" they promised will be around tomorrow. Or that they'll be around tomorrow. Why take any chances when GVP has everything on your countdown list *today*!

	IV24™
Integrated video genlock	✓
1.5MB 24-bit, 16.8 M color frame buffer	✓
Real-time framegrabber/digitizer	✓
De-interlaced video flicker eliminator	✓
VIU-S™ with RGB, composite, S-VHS input/outputs	✓
Optional VIU-CT™ pro-grade component transcoder (Betacam, M-II compatible) input/outputs	✓
2-way moveable, sizeable PIP (picture inpicture) display, (video over application or application over video)	✓
Digital and analog key inputs	✓
Captured image retouching/processing	✓
Video switcher transitions	✓
Real-time 24 bit paint	✓
Animation/3-D rendering	✓

The VIU Advantage:

GVP is serious about video! So **IV24's Video Interface Unit** gives you more choices for inputting and outputting video signals than any other Amiga® peripheral on the market. Nobody else gives you a VIU splitter, let alone one that does so much. **IV24's VIU** manages video from computer sources, component tape formats, composite video, even broadcast professional formats—in any combination you can imagine.

Software Mission Control

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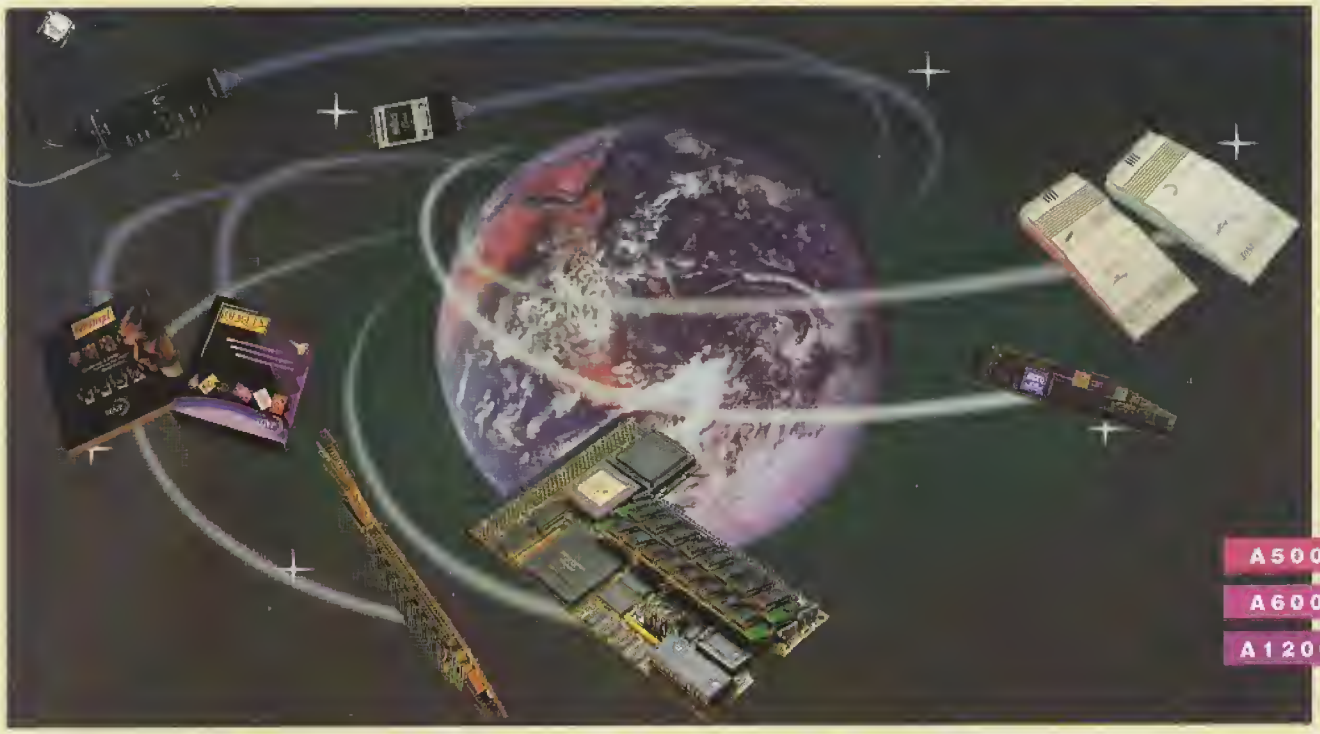
Syndesis introduces Mac PICT-format reader and writer (third party).



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A new high capacity Syquest removable hard drive has been announced. The SQ3105 offers speed and removable storage on a new 3 1/2 inch format. You can store around 105Mb on these new-fangled cartridges, and with the smaller size the whole unit will happily mount in the A2000, 3000 or 4000.

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Art Department 2.3

ASDG Incorporated announces a major upgrade to their product, *Art Department Professional*. The new release contains several firsts which increase the level of integration of the Amiga's most popular imaging tools.

Videographers now have a direct Framestore-to-D1 digital video connection using ADPro's ABEKAS digital video driver. This is today's most effective means of moving video data to and from the Amiga and has been used in such high profile productions as *Quantum Leap, Babylon 5* and The American Music Awards.

ADPro 2.3 also provides an exclusive direct memory link to the newest version of *Deluxe Paint* from Electronic Arts, as well as OpalVision's 24 bit-plane paint program.

ADPro has direct access to *DPaint*'s memory including its primary, secondary, and animation buffers. A similar capability is provided for *OpalPaint*.

Users of either paint system can directly load and save images in any file format which *ADPro* supports. The same is true for any of *ADPro*'s image processing capabilities. For more information contact Desktop Utilities on (06) 239 6658.

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Show Preview

New Releases for World of Commodore

IV24 2.0

Great Valley Products has announced that it is set to release Version 2.0 of its IV24 multifunctional video board.

At the heart of Version 2.0 is enhanced software which greatly increases the capabilities of the IV24. According to GVP, especially impressive is the new *MacroPaint 2.0* software. This real time, 16 million colour paint package features high performance painting, and a full colour, floating toolbox-style interface that gives the user the ability to move the toolbox to a more convenient location.

Also new is the ability to load and save JPEG compressed files. Painting can be done on a 24-bit image, while viewing the work in 12, 15, 18 or 21 bits for faster screen updates and lower Amiga graphics memory requirements. *MacroPaint* contains so many new features and enhancements that it comes with a brand new manual.

A newly designed custom version of *Caligari24* gives the user many more features than the original. Rendering directly to the IV24, *Caligari24* now features an unlimited number of light sources, hierarchical animation which coordinates the movements of complex objects with their primitive sub-objects, and free form definition for more realistic rendering of organic objects like plants and flowers. Broadcast rendering capabilities ensure photo realistic representation of scenes. Like *MacroPaint, Caligari24* also comes with a new manual.

MyLad and Desktop Darkroom are also included in this upgrade. MyLad, a switching package, enables users to enhance their video productions by utilizing a number of simple, yet creative transitions between video sources, while Desktop Darkroom offers image capture and complete photo retouching capabilities, as well as a full range of special effects for image manupulation and image processing.

A separate IV24 upgrade kit for existing users should be available soon too. This major upgrade, which as been eagerly awaited by IV24 owners, consists of a ROM, several enhanced software packages and new manuals. The version 3.10 ROM allows for A4000 compatibility and also allows the new software to run on existing IV24 boards.

For more information contact Power Peripherals on (03) 532 8553, or see them on Booth H1 at the WOC Show.

OpalVision Upgrades

Centaur Development has released details and shipping dates for the enhancement modules for OpalVision. The three new enhancement modules add a wide array of previously-unannounced features to the OpalVision system.

The OpalVision Video Processor plugs directly into the Main Board. It is a real-time, 24-bit framegrabber, a professional quality genlock with chroma and luma keying and includes the OpalVision Roaster Chip for unlimited transitions, colour processing and Digital Video Effects. It also includes controlling software for all functions and a 24-bit, 35 ns character generator.

The OpalVision Video Suite is a complete audio and video mixing, switching and transcoding device. It is a 19-inch, rack mountable external unit with nine video and ten audio inputs. Video inputs and outputs are available simultaneously in RGB or Y/R-Y/B-Y, composite and S-Video. Its linear transparency key provides transparency control between two video sources on a pixel-by-pixel basis. The audio mixer is fully software sequenced with smooth fades and full 5-band stereo frequency equilization.

The OpalVision Scan-Rate Converter also plugs directly into the Main Board. It converts PAL and NTSC signals to 31kHz for non-interlaced, flicker free display of Amiga and OpalVision graphics and live video. It operates with any multi-sync/multi-scan monitor. Additionally, the Scan-Rate Converter includes a full, infinite window Time Base Corrector which operates in RGB for excellent quality.

All three of the additional modules will be available this spring and will have a suggested retail price of $995.00 each.

OpalVision automatically self-configures for both PAL and NTSC video modes and works with the Amiga 2000, 3000, and 4000 computers. See Opal Technology at the World of Commodore Show.

SCSI-2 for A1200

ICD has announced the first VDP plug in card for an Amiga 1200 computer equipped with the Viper 1230.

Viper S2, the first VDP peripheral designed for the Viper 1230, is a full DMA SCSI-2 controller offering truly sustainable transfers of 5 MB/sec asynchronous and 10 MB/sec synchronous.

Viper 1230's DMA Port (VDP) allows the design of high speed add-ons that take full advantage of Direct Memory Access (DMA) and the speed of a Viper 1230 equipped Amiga 1200 computer.

Viper S2 plugs directly into the DMA expansion connector of the Viper 1230 board. A plastic knockout in the back of the computer is removed, Viper S2 is plugged in, and one securing screw is installed in the bottom of the computer. Nothing other than a screw driver is required for installation. Viper S2 provides a standard high density SCSI-2 connector on the back of the Amiga 1200 computer.

For those who desire only the best, an internal high density SCSI-2 connector is included to directly support a 2.5 inch SCSI hard drive inside the Amiga 1200.

A three foot SCSI-2 cable is included to connect with an external SCSI peripheral using the standard Centronics 50P connector. Viper S2 is competitively priced and unsurpassed in speed.

An Australian supplier has not yet been announced, but try Amitech on (02) 544 1874, or see them at booth C1-C2 at the World of Commodore Show.

PageStream 3.0

According to SoftLogic, the way you think about desktop publishing on the Amiga is about to change. They've just announced *PageStream 3.0*. This is not just an upgrade, but a completely new program. A feature list prepared by SoftLogic is included, so we can't vouch for its accuracy. Nevertheless, if half the specifications are correct, *PageStream 3.0* is a winner.

Partial PageStream 3.0 Feature List

x feature present o feature present/limited implementation
NB unlimited means limited only by memory
+ more formats may be added before release ? could not be confirmed

Interface	PageStream	Quarkxpress	Propage
Maximum number of open documents	unlimited	7	1
Max number of document views	unlimited	1	1
Reveal/Hide document views	x		
Moveable document view windows	x	x	
Save program defaults	x	x	
Load program defaults	x	x	
Pasteboard/bleed area	x	x	x
User-specified pasteboard size	x	x	o
Toolbox	x	x	o
set position	x	x	
set tool size	x		
set toolbox orientation	x		
Edit Toolbox	x	x	o
Number of palettes/panels	6	6	0
Measurement system options	11	7	3
Set ruler zero point and offset	x	x	o
User-specified view magnification	x	x	o
Number of view magnifications	13	6	5
View magnification zoom	x	x	x
Show/Hide invisible characters	x	x	
Undo levels	unlimited	1	1
Online help	x	x	
context sensitive	x	o	
cross-referenced ("hyper") help	x		

Document Construction	PageStream	QuarkXpress	Propage
Number of pre-defined page sizes	9	5	6
Maximum page size (in inches)	2330"x2330"	48"x48"	48"x48"
Different page sizes in a document	x		x
Change page size at any time	x	x	x
Maximum document size (in pages)	unlimited	2000	9999
Single and double sided documents	x	x	x
Page spreads	x	o	
Maximum number of master pages	unlimited	127	0
Hide master page objects	x		
Visual page arrangement	x	x	x
Divide documents into sections	x	o	
Divide sections into chapters	x		
Automatic page numbering	x	o	o
Link and unlink columns	x	x	o

Word Processing	PageStream	QuarkXpress	ProPage
Cut, copy and paste text	x	x	x
standard keyboard shortcuts	x	x	

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Multiple Style sheets	x	o	o
Load and save style sheets	x	x	x
Find and replace text/attributes	x	x	o
Find and replace style sheets	x		
Spelling checker	x	x	o
Import/Export formats	7/7+	9/6	9/0
auto conversion of quotes	x	x	
auto conversion of commas	x	x	
auto conversion of dashes	x	x	
Maximum number of tabs	unlimited	20	16
number of alignment options	4	4	1
place numerically or manually	x	x	o
right indent tab	x	x	
User-definable tab leaders	x	x	
List all articles used	x	x	

Typography	**PageStream**	**QurkXpress**	**Propage**
Number of outline font systems	3	2	1
Font sizes	1-50,000	2-720	2-720
increments	0.01 pts	0.001 pts	0.125 pts
horizontally scale text	x	x	
Align text vertically	x	x	
Indents and outdents	x	x	x
Auto/Manual hyphenation	x	x	o
hyphenation controls	x	x	x
Auto/Manual kerning	x	x	o
edit kerning pairs	x	x	x
Auto/Manual tracking	x	x	o
Absolute and relative leading	x	x	x
increments	0.01 pts	0.001 pts	0.01 pts
Frameless text	x		
convert frameless <-> framed	x		
Convert shapes to text columns	x		
Apply color and fill styles to text	x	o	o
Automatic drop caps	x	x	o
Automatic bulleted paragraphs	x		

Graphics	**PageStream**	**QuarkXpress**	**ProPage**
Import Bitmapped Pictures	x	x	x
number of formats	6+	8?	5
set frequency, angle and pattern	x	x	
contrast and posting control	x	x	
bitmap fencing for text flow	x	x	
display bitmaps in color	x	x	x
externally linked bitmaps	x	x	x
Import Structured Drawings	x	x	x
number of formats	5+	4	2
dissolve into paths and shapes	x		
Import EPS Illustrations	x	x	x
interpretable EPS formats	2+	0	3
show bitmap preview TIFF/PICT	x	x	o
Make pages into EPS files	x	x	x
List graphics in a document	x	x	x

Colors	**PageStream**	**QurkXpress**	**Propage**
Number of color models	6	6	2
24 bit color support	x	x	x
Create process and spot colors	x	x	x
Color Tints	x	x	
shade increments	0.01%	0.1%	
UCR/GCR	x	x	x
Set screen angle and frequency	x	x	x

Trapping	**PageStream**	**QurkXpress**	**Propage**
Automatic trapping	x	x	
User-definable trapping	x	x	
Chokes & Spreads	x	x	
Knockouts & Overprints	x	x	
Set trapping for each plate	x	x	

Drawing and Object Editing	**PageStream**	**QurkXpress**	**Propage**
Drawing tools	x	x	x
basic shapes	x	x	x
freehand	x		
pen/draw tool	x		
Select multiple objects	x	x	x
add/remove from selection	x	x	
select behind	x	x	
Bring/Send to Front, Back	x	x	
Bring/Send Forward, Backward	x	x	
Cut, copy and paste	x	x	x
Move and nudge objects	x	x	
Step and repeat duplication	x	x	
Rotate and skew objects	x	x	o
rotation increments	0.001^	0.001^	1^
Group/Ungroup objects	x	x	o
Lock/Unlock objects	x	x	o
Distribute objects	x	x	
Set color/line/fill of objects	x	o	o
Bitmap fills	x		x
Gradient fills	x	o	
Object fills	x		
Text runaround objects	x	x	o
Extend objects across page spreads	x	x	

Page Layout	**PageStream**	**QurkXpress**	**Propage**
Margin and column guides	x	x	
Object guides	x	x	
snap-to-guides, snap distance	x	x	
Grid	x	x	x
snap-to-grid	x	x	x

Printing	**PageStream**	**QurkXpress**	**Propage**
Current page, range, even/odd	x	x	o
Printer spreads	x		
Print CMYK/mechanical separations	x	x	o
Plate control	x	x	
Tiling, thumbnails, crop/reg	x	x	x
Print PostScript to disk	x	x	x
Render to bitmapped picture	x		
Custom Printer Drivers	x		x
PostScript	x		x
Hewlett-Packard inkjet/laser	x		
Epson compatibles	x		
Plotter support	x		
PPD support	x	x	

Environment	**PageStream**	**QurkXpress**	**Propage**
Open program architecture (for adding extensions)	x	x	
Text (article) editor	x		x
Picture (bitmap) editor	x		o
HotLinks compatible	x	x	
ARexx (scripting) compatible	x		o
ARexx (scripting) record	x		
AGA compatible	x	n/a	o
Workbench screen compatible	x	n/a	x
Public screen compatible	x	n/a	
create public screens	x	n/a	
Custom screen compatible	x	n/a	x
Follows interface style guidelines	x	x	
Price	$299.95	$895	$299.95

Hardware requirements are an Amiga with hard drive, 2MB of memory (512K chip), and AmigaDOS 1.3 or higher. If you are a registered owner of a Soft-Logik product, you will be notified of the release of *PageStream 3.0* (expected in late summer 93). If you have purchased *PageStream 2.2* on or after March 15, 1993, you are entitled to a free upgrade. Contact SoftLogik direct (see details in the front of your user manual), or talk to your local Commodore dealer for more information. Booth E9 at the World of Commodore Show.

New A1200 Accelerator

ICD's new Viper 1230 is designed to give the popular Amiga 1200 the performance of a workstation. Viper 1230 offers Amiga 1200 owner a 68030 accelerator supporting high speed memory expansion, an FPU coprocessor socket, a battery backed-up real-time clock, and a unique 16-bit Direct Memory Access (DMA) port for further expansions.

Viper 1230 uses the power of the Motorola 68030 and supports both EC and MMU versions from 40 to 50 MHz. When compared to the A1200's stock 68EC020 running at 14 MHz, the larger cache and higher speed of the Viper 1230 processor will make applications fly.

Up to 32 MB of fast RAM can easily be added to Viper 1230 using industry standard 32-bit wide 72-pin SIMM modules. Two high quality SIMM sockets are on board for memory expansion. Burst mode, for top speed, is fully supported using low cost, page mode DRAM.

With the addition of a high speed Motorola 68882 math coprocessor (FPU), all floating point math routines will run at near warp speed. Applications such as animation, ray tracing, image processing, DTP, and CAD will show an amazing improvement.

The battery backed-up clock that is missing from the A1200 can be found on Viper 1230.

Viper's DMA Port (VDP) allows many opportunities for high speed add-ons of the future. Products like a SCSI-2 controller, DSP board, modem, or networking card could be developed to accommodate this port.

The RAM, CPU, FPU, and the clock battery are all socketed and changeable using industry standard parts. The low-cost 40 MHz 68EC030 is supported as well as the 50 MHz 68030 for those who want the ultimate in performance with an MMU. Both 40 and 50 MHz FPUs are supported. Low-cost industry standard SIMMs are used for memory expansion. Viper 1230 and VDP boards are installed without removing the top of the computer. This ensures that Commodore's warranty remains intact.

An Australian supplier has not been confirmed, but for further information, contact Amitech (02) 544 1874, or see them at Booth C1-C2 at the World of Commodore Show.

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Software Review

3D Animation with Aladdin

by Karl Dewet

There's literally a myriad of 3D drawing and rendering programs for the Amiga. You've probably marvelled at the realistic pictures rendered using *Imagine* or *Real 3D*. It can take many long hours to draw those intricate objects and then hours waiting in anticipation for the image to be rendered. If you're like me and have no patience, but love those 3D images, there are two solutions to our problem.

The first is to go out and buy an accelerator card or a much faster machine. Now hands up everyone with a couple of thousand dollars to throw away ... I didn't think so. This option is not only expensive, but also leaves you without the funds to buy a 3D package.

The second solution is to buy Aladdin. It gives excellent end results without the long waiting associated with this type of program. In my opinion, Aladdin is also the easiest for a beginner to use.

Features

It's hard to know what to start talking about, because *Aladdin* has so many features. The most important point is clarify is what *Aladdin* doesn't do. Namely, it doesn't ray-trace.

(If you don't know what Ray-Tracing is, take a break and read the nice little box with this article.) It seems that to be a successful 3D modelling/rendering package the program must Ray-trace!

Although Ray-Tracing achieves some remarkable results it is such a maths intensive process that it is often just too slow. From the inception of *Draw-4D* it was clear that the makers have tried to achieve a trade-off between a lightning fast renderer and a package which gives the best looking images.

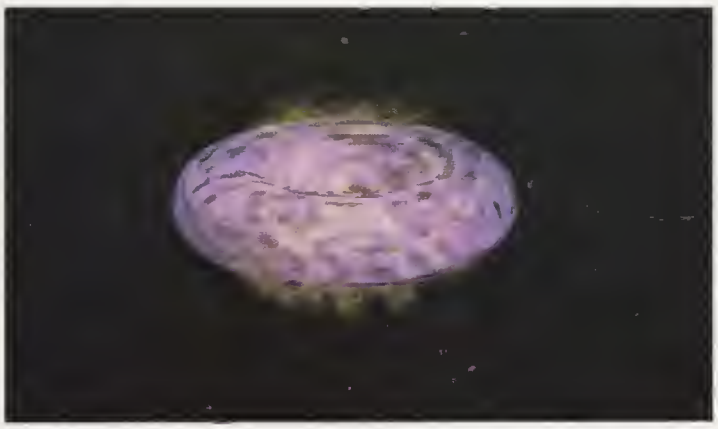
I think that this trade-off has worked well, because Ray-Tracing is just too slow for the average user. So what *Aladdin* does is employ virtually every other method for shading and rendering available to achieve truly awesome results. The two shading methods it uses are called Phong and Gourad.

Apart from Ray-Tracing, Phong shading is the most popular type of shading method used in this type of program. So if you have used *Calligari*, *Draw-4D*, or *Imagine* then you will be familiar with the way *Aladdin* colours in your objects. Phong uses a simple trigonometric theorem to set the brightness of the polygons which make up an object and also blends the edges of adjacent polys so that you can't see a transition from one poly to another. Gourad does something similar, but is less maths intensive and therefore faster.

The reason why people want their 3D package to Ray-Trace is because it treats your objects as if they were in the real world, so they cast shadows. *Aladdin* casts shadows by using the same methods Ray-Tracing uses, but only for this purpose so it retains its speed. Ray-Traced objects reflect light from light sources and light bouncing off other objects, *Aladdin* does this also. If your object is somewhat transparent light will pass through it, just like a Ray-Tracer. So all the reasons why you wanted a Ray-Tracer can be fulfilled by *Aladdin*.

Vital Differences

Although *Aladdin* does do all of the above it must be understood that it does not do it in the same way as a ray-tracer. What this means is that under some circumstances the same model ren-



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dered in Aladdin and a ray-tracer will look different. Unfortunately the ray-traced image will be correct, which doesn't really matter unless you are trying to solve a physics problem.

On a final note on *Aladdin*'s rendering capabilities, it is quite a shame that you can't exit to workbench and multitask while your image renders. This means that as much as you love your Amiga, you're forced to watch the image develop until it is finally shaded.

The Interface

Of all *Aladdin*'s features the interface is the one which seems to be the most controversial. Some people like it, but most that I talked to hate it. Why? Because it is different to the ones used in *Imagine* and *Real 3D*. *Aladdin* uses something called a 'direct window into 3D space'. This is a fancy way of saying that you edit your objects right there in 3D form. This makes it difficult to create complex objects because you must draw the whole object, not just in three views as in *Imagine*.

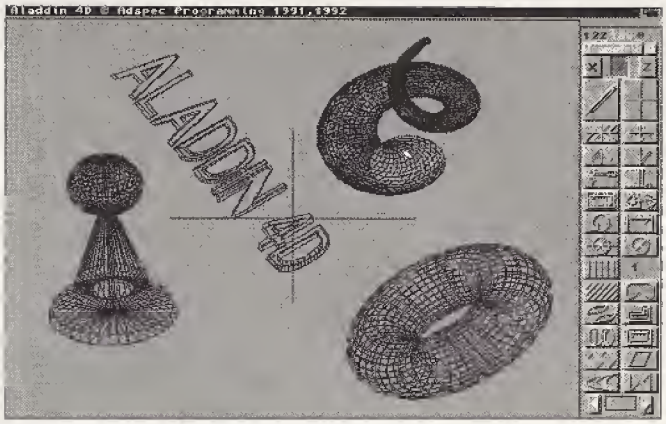
The tools are set out *DPaint* style down the right side of the screen, and everything else is in pulldowns. The interface may not be easy to use at first but it is very full featured.

Aladdin's Magic

I found that there were two quite powerful features presented by *Aladdin* which, in themselves represent what could be a good reason to buy the program. The first is the ability to create gaseous objects (amazing!), and the second is the ability to put waves onto your objects.

Once you have spent a few hours playing with gases (and gone through a very helpful tutorial from the manual) you will start creating some very impressive effects, such as the gas I generated for this article. Gases allow you to change the transparency of space wherever the gas exists without having to modify the transparency or colour of your object.

For example you could do an animation of some type of spacecraft flying



from empty space into a cloud of turbulent gas and the view of your object would be obscured by the colour and density of the gas. This application must be seen to be believed.

Rub the lamp once more and you will be transported into another world, a world where your objects come to life, where their hard textured skin has waves running through them! Waves? Yes waves, the kind you learned about at school in physics.

Any polygon or object you create can have a wave or many waves added to it easily. Not just one type of waves, but a multitude of them. Linear x, y or z, spherical, multi or bumps. Simply adding two or three waves to a simple Torus can generate an image with what seems to be a randomly curved surface.

Once you see a few rendered waves you will want to use them in all your work, because the random curves give your images a subtle touch of reality which is seldom found in computer graphics. Hours can be spent marvelling at the curves and shadows cast by waves.

What is Raytracing?

To create true to life images from the models you create, many 3D rendering programs employ raytracing. Instead of simply shading each object, the scene is created by tracing the path of light around the scene. Each object may be set to absorb, reflect or allow to pass a certain amount of light. The resulting reflections, shadows and subtle shading produce very realistic images.

Tainted Lamp?

Well not really. But there are a few small problems I found while using *Aladdin*. The most annoying of these (as I have stated) is the inability to exit the render window while your image renders. Although this may seem trivial it made it impossible for me to render an image for this article while I typed the review itself on a word processor.

Another problem which I came across was that *Aladdin* would not render in Ham8 on the A4000 but happily (and very quickly) did so on the A1200 that I used. This one escapes me, but I'm sure it will be sorted out soon.

Other small problems were encountered, but as I have found out perseverence and a bit of long hard thinking usually overcomes these.

Which Amiga for Aladdin?

Aladdin was tested on five different machines. The first was the A4000 with Opalvision, the results were nothing less than amazing. The time to render objects was so fast I thought I was doing something wrong. Animation was literally limited by the amount of hard drive space available.

If you have an A4000 you should

also have *Aladdin*. It's that simple, because it's the best way to show off the power of your machine.

Next in line was the trusty A500, and an A600. *Aladdin* was a bit sluggish on these slow machines, you really need something more to have fun with *Aladdin*, although it still worked fine as long as you had enough RAM. Luckily for me I did have another fast machine on my desk.

The 68030 powered A2000, with four megs of RAM. Not very impressive after playing with the A4000, but more powerful than most Amigas. On this machine *Aladdin* was lightning fast and could be set the task of tediously rendering frame after frame of a long animation while we worked on the A4000.

There is one machine where *Aladdin* really made my jaw drop and that was on the A1200. Firstly rendering is very fast. Secondly the Ham8 output was very, very similar in appearance to 24-bit output. For such an inexpensive machine it seemed ludicrous that it would be able to do this type of thing, let alone do it so well.

Aladdin should be sold with the A1200 as a graphics power station, with lots of "spiffy" pictures on the box. It would sell very quickly. Ham8 really is as good as it is advertised to be, and for all you A1200 owners out there *Aladdin* was made for you.

Unmatched Quality

I do an awful lot of 3D modelling and rendering, in fact it is about all I use the Amigas for, and I have found that there is one main factor which contributes to the quality of my output images. This factor is feedback time. That is the time it takes to render an image, to see what is wrong with it, fix it, then render it again. If feedback due to rendering time is slow, a small mistake like the wrong lighting or even forgetting an object instantly sets you back many hours. In *Aladdin* the rendering time would usually be less than an hour for a short animation. What this means is that not only can you fix up your stupid mistakes much quicker, you can also perfect your images by saying "what if I just change this a bit".

The images created for this article were redone about seven or eight times each to get the desired effect perfectly. As you can see, there is no more powerful tool in a rendering package than feedback.

Aladdin is a powerful tool for those of us who are obsessed with high end graphic output and have little time to waste. Image quality is second to none and perfect for any presentations you would want to do, or for titling your home videos with a touch of finesse. For your hard earned cash *Aladdin* cannot be beat.

(Review copy supplied direct from the publisher. Contact your local Amiga dealer for pricing and availability.) ❑

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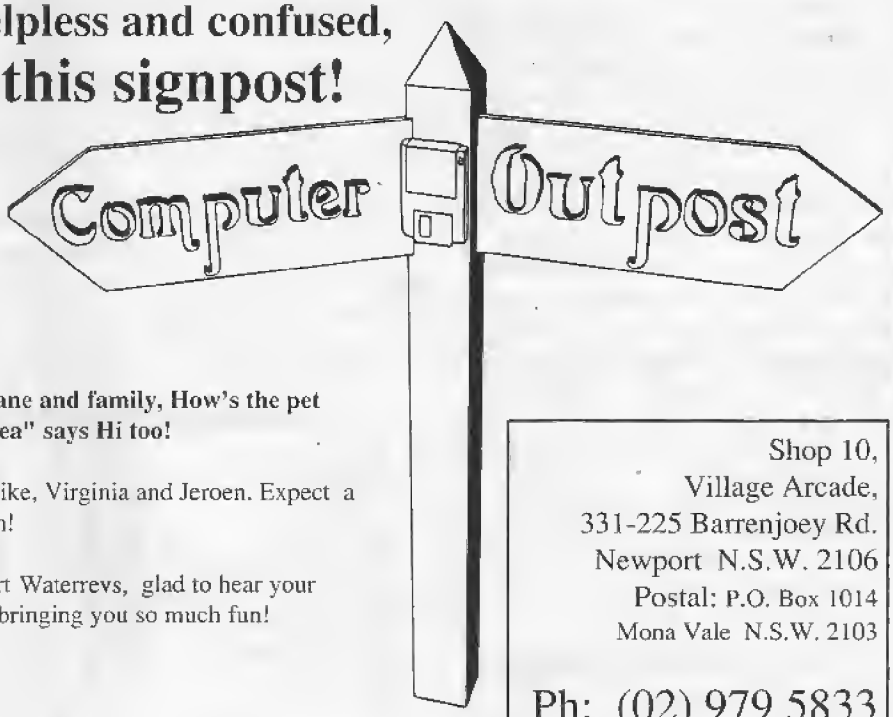

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How to Beat those Disk Swapping Blues

Tired of swapping disks all the time, but a hard drive's out of your budget? Don't worry, living with floppy disks doesn't have to ruin your nerves. Heiko Wynen tells you how to keep your sanity.

Running any computer on floppy disks only can be a frustrating task nowadays. The Amiga has an unpleasant habit of testing its user's patience with the notorious "Please insert volume ..." requester.

Programs need certain software libraries and device drivers to function, which are not part of the program itself but need to be accessed on the disk with which the machine was booted.

Consequently, if a program comes on a single bootable disk, even owners of a single drive Amiga will only have to swap disks for saving their projects to a data disk if there isn't enough room on the program disk.

As soon as a second application needs to be run - a graphic needs editing for use in the wordprocessor, for example - the problems start as the second program often relies on different libraries or fonts from those contained on the boot-up disk. So it will not run unless the computer is rebooted from the second disk. This procedure is time consuming and rather clumsy.

Especially as another reboot may become necessary after the sub-task, in our example the graphic manipulation, has been finished, and this time the required libraries for the wordprocessor are not on the boot disk.

The Quick Solution

Obviously, the simplest and by far the most elegant solution to this problem is the installation of a hard disk containing all the commonly used programs and every file required for faultless operation. No more unnecessary booting from floppy, much swifter access times and the huge storage capacity of such a hard drive make a hard drive one of the Amiga's most desirable accessories.

Unfortunately, however, even a bargain priced hard drive may still be difficult to justify from an economical point of view if the computer is only used for the odd productivity job in the home.

Under those circumstances it may well be worthwhile to customise the available software for one's individual needs, although the purchase of at least a second floppy drive would make things much more comfortable even if the Amiga is mainly a games machine.

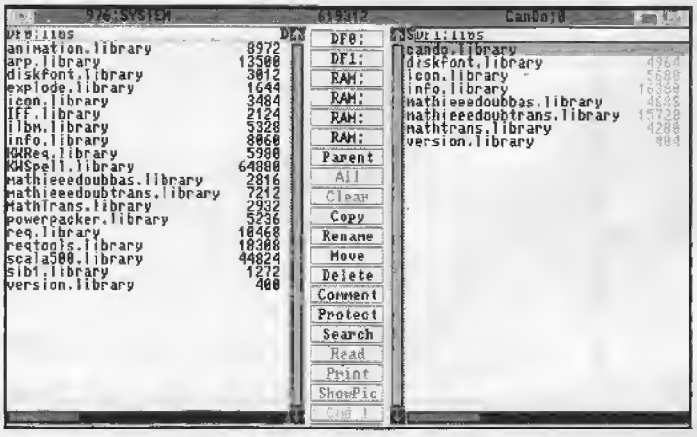
If you are horrified at even thinking of having to use the CLI, don't panic. Customising your software can be made very simple by using just a couple of cheap public domain utilities, available from most good PD libraries like Prime Artifax. If you have never tried any of the often well presented and powerful programs available for nothing but a handling fee or very reasonable shareware contribution, this is just the right opportunity.

Two titles to help make Amiga file handling transparent are *DiskMaster* and *SnoopDOS*. While the latter can be a great help if something goes wrong and a program fails to work as expected, *DiskMaster* is an easy to understand and easy to use file management utility. There are similar, more sophisticated and extensively user configurable competitors available, like *SID*, but they tend to be somewhat confusing for the newcomer.

The System Against the Blues

To solve the disk swapping dilemma of single floppy systems is simple. Equipped with a few handy utility programs and a little knowledge of how Workbench is organised you can quickly

This screen shot of an older version "DiskMaster" shows how simple it is to make your own SYSTEM disk. In this example the CanDo.library on the original CanDo program disk in DF1: has not yet been transfered to the LIBS directory on the new SYSTEM disk in drive DF0:. As it is already highlighted (clicked on with the mouse), a click on the copy button in the centre of the screen would add the file to the disk in the internal drive in the right location.



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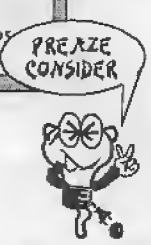

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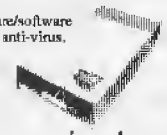

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create a Workbench disk that contains all the needed fonts, libraries, devices and special programs expected by other programs you'll be running.

The first step is to make a backup of your standard Workbench disk. Using the diskcopy command outlined in the manual may be your only choice, however you'll probably have to make a few disk swaps. Some commercial and public domain copy program use available RAM as a buffer, copying as much of the first disk into memory as possible before asking for the destination disk. This is a big time saver.

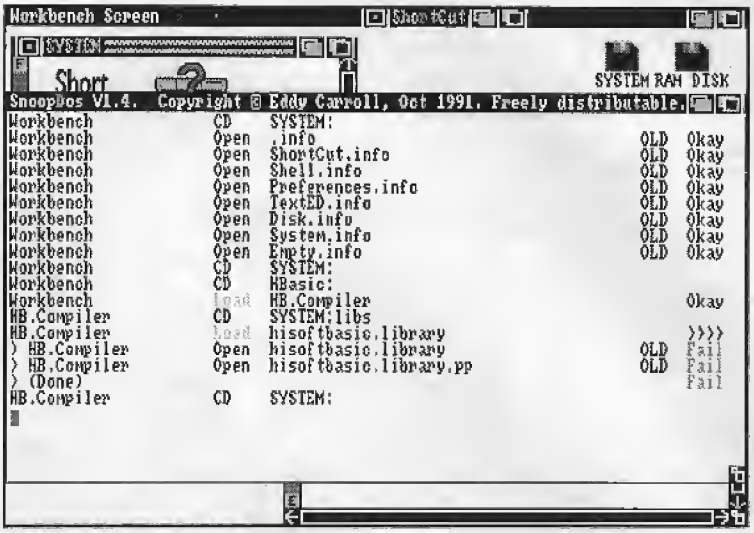
Once you have a backup, check the name of the disk. If you used diskcopy it will be called "Copy of" followed by the original name. Be sure to rename the disk to something easier, like SYSTEM or Workbench.

Now you need to make some space to add a few things to this disk. We've had entire articles on this subject before. You can make room from Workbench or using a program like *Diskmaster*, which gives your CLI command power using the mouse.

From Workbench you can safely delete most of the program in the Tools and Utility drawer. Be sure to leave any behind you know you use. From *Diskmaster* you can also delete any fonts you don't use from the fonts directory. These two steps should give you plenty of extra room. You can get even more space by compressing files on your Workbench using Imploder or PowerPacker.

Adding to your Workbench

Now you've got a customised Workbench, the next step is to add to it the things your programs are demanding that require you swap disks. You need to find any libraries, fonts, C programs or anything else needed from the disk you normally boot from to run the program. For example, *Deluxe Paint IV* uses a special font called Dpaint. If you boot you Amiga from a normal Workbench and then try to run *Deluxe Paint*, it will complain about not finding the Dpaint font.



When a program refuses to run, "SnoopDos" lists exactly which files are missing and where they should be located.

So, you know what to do! Copy the dpaint.font and dpaint directory from the *Deluxe Paint* disk fonts directory onto your new Workbench font directory. You can do this in *Diskmaster*. With one drive, copy the files you need to your RAM: drive, then swap disks and copy them from RAM: to the Workbench. Be sure to put them in the right place, in this case, the fonts directory.

Finding out what Files are Needed

Deluxe Paint is a good example of a program which makes it easy to see what's missing. Others are a lot tricker. A little utility we use called *SnoopDOS* is very handy here. Simply run *SnoopDOS* first, then run the program you're having trouble with after booting from your new Workbench. *SnoopDOS* will report what files the program is having trouble loading and where it's trying to load them from.

Now you know what's missing, once again use *Diskmaster* to copy the missing files from the original program boot disk onto your new Workbench. Make sure the files go into the corresponding place.

Once you've got all the bits you need onto your new Workbench, try adding *Diskmaster* or any other utilities you need from time to time too. That way, you'll have one disk you can run your Amiga with that contains most of the day to day things you need.

Now when you need *Deluxe Paint* when you're in the middle of wordprocessing, you can bring Workbench to the front, pop in the disk, run the program and *Deluxe Paint* will happily find all it needs on your Workbench disk. You'll still have to do a little disk swapping but at least everything will now run!

How to Totally Eliminate Swapping

This is a little trickier, as you will need to know exactly what parts of Workbench you need and just what you can do without. The Workbench 1.3 Enhancer manual has a section in it on RAD: drives which covers this. A good clue is to look at what is on the boot disk for the programs you run. Usually they only contain the minimum needed.

Make a backup of your Workbench as before and then delete as much as possible. Move as many programs and applications as you can onto this new disk, plus any special fonts, libraries and so on as mentioned before. Now you have a bootable Workbench with everything you need. ❑

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The Animation Workshop

Cut, Splice, Scale, Delay in a mouse click

by Dennis Nicholson

To say that *Anim Workshop*, or *AWorks* as the manual prefers to call it, is the answer to every Amiga animator's dream is an understatement! This program has arrived on our shores completely unannounced, but after using it for a very short time I was asking myself the question ... "Where have you been all my computing life?"

The package says "You can supercharge your work like never before" - believe me, it's true!

Have you ever wished you could alter the resolution of an anim file painlessly? Imagine you have just spent three months creating your 1000 frame 'master work' in high resolution mode (640 x 512 x 16 for example) for the world to see, but alas, you cannot show the world because it's too large to distribute on one disk. If only you had made it in low resolution instead.

You could now convert the 1000 frame anim file back to individual IFF images, laboriously re-size each image and finally produce another anim in the low-res mode. This could take you another three months. Think of the coffee expense!

You could start all over again and spend many more long hours manufacturing a new low-res version. Or you could invite the world to your home to see your original high-res version.

Or just maybe you'll purchase this newfangled program called *Anim Workshop* to do all the hard slogging for you. Believe me when I say you will opt for the latter once you see it in operation!

No problem for *AWorks*, simply import your original high-res anim file, select SCALE, and choose a new screen size, in fact any size you like. *AWorks* will then begin its magic and automatically re-size the entire anim file accordingly. Your 1000 frame high-res file will be converted to a 1000 frame low-res anim in under ten minutes! But that's just the tip of the proverbial iceberg with this wonder program.

Power

It can also convert anims to and from two, four, eight, 16 and 32 colour, HAM, HAM-E, DCTV and EHB (ExtraHalf Brite) modes. It will easily alter standard screen size anims to new overscan versions. It is also has the ability to re-colour anim files, as well as cut and paste frames.

It will flip anims (or selected frames), combine anims with other anims and/or individual images, and replace frames with other images or even whole animations. It has no problems converting NTSC anims to PAL formats and vice-versa, but here comes the icing on the animation cake.

AWorks allows you to synchronise sound with specific anim frames. Yes, you can actually select any frame number and instruct the software to link a sound effect to it. Deluxe Paint can't do that!

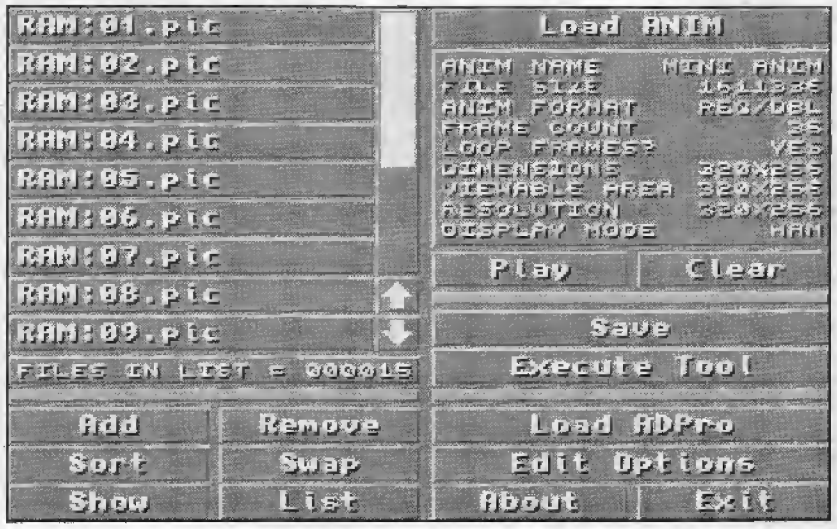
AdPro Required

Let me come down from anim-cloud nine for a moment and mention that all that glitters is not gold - in this case, all that flickers is not because of *AWorks*. The software needs a helper to perform its amazing tricks. *AWorks* has been designed to operate in tandem with ASDG's image processing package *Art Department Professional*. It uses *ADPro*'s features and tacks many new additions on for good measure.

Referring back to the high-res to low-res anim conversion, *AWorks* is the controller of the operation, but it uses *ADPro*'s Scaling function to make the changes. Which basically means that both programs have to be running for many of *AWorks*' options to work.

Let me give you another example, As one of *AWorks* basic functions, it is capable of taking a list of images (24-bit or less) and creating an animation out of them. But 24-bit images (RGB) must be converted first to an Amiga

The Anim Workshop screen interface - similar in design to AdPro



viewable format. This is where *ADPro* enters the picture (excuse the pun).

With *ADPro* running, *AWorks* will automatically load the RGB files and convert them and then attempt to create an animation (assuming all images are the same size). *Aworks* can actually start *ADPro* for you if it is not already running, then fully configure it for your personal preferences.

When *ADPro* is first loaded *AWorks* gives you the opportunity to tell *ADPro* how much chip and fast RAM it is allowed to use. It is also possible to select which *ADPro* Loader/Saver options you want to interact with. Incidentally, the *AWorks* screen interface has been designed to closely match the style of the *ADPro* requesters.

The Anim Workshop TOOLS requester

Hands on Example

Let me take you through an example of how *AWorks* operates. For this exercise I will describe how to add sound to an anim file. After *AWorks* is up and running you select the LOAD ANIM button to import the anim file. You are then shown a listing of the anim file's main attributes - name, file size, frame count, dimensions, resolution and display mode.

The anim can be instantly viewed with the PLAY button. You can even freeze on an individual frame by clicking the left mouse button, or step through it one frame at a time. When an animation is playing *AWorks* offers many additional options, all of which are accessed via the Animation Control Panel.

This panel, activated by the return key, sits in front of the running animation. It contains a frame counter and a set of buttons for animation speed and direction control. Included within the

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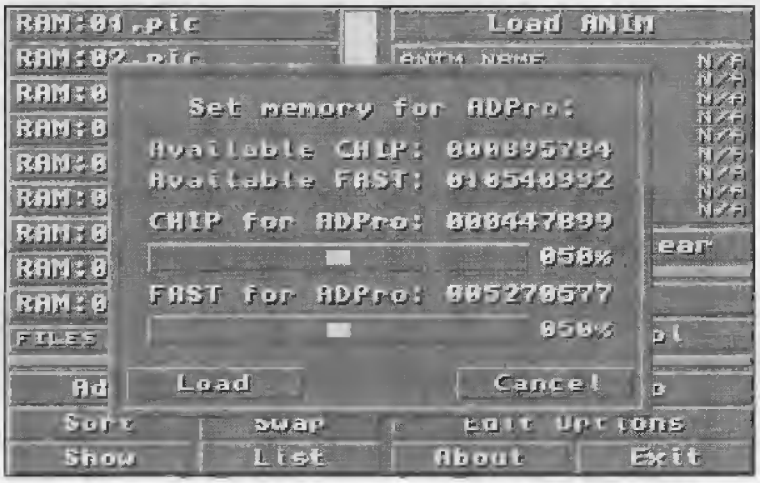

Set AdPro's memory using the AWorks option

control panel is one feature I have desperately wanted for years - a frame rate indicator, but with a much-needed addition.

As well as showing you what speed the anim file should be running at - for example 25 frames per second (fps) - it also shows you how fast the anim is ACTUALLY running. Since some animations have large changes in the images from frame to frame, you may not always get an anim to play back at the original frame rate you set. At least you can easily find out how fast it IS running by looking at the frame rate indicator. I tested an anim file that was created at 30fps in *Deluxe Paint*, but *AWorks* told me that it was only running at 22fps.

There's more! (*Don't tell me - a free set of steak knives - Ed*) You can even set timings for individual anim frames. If you want frame number 56 to pause for a few seconds just use the inbuilt TAG option and tell it how long to hold that frame when replaying the anim file.

With this kind of timing option you can insert pauses into any animation and have totally customised playback timing throughout. Using the VIEW POSITION option it is even possible to move an animation around the screen while it's running. This is useful if you have an animation that is larger than the Amiga's viewable screen area or the view window size set within *AWork*'s Conversion Options requester. But I digress, back to the sound side of things.

Once an anim is loaded, you select the FRM (Frame) INFO button and you are presented with the Current Frame Information panel. At the top of this panel is displayed the current frame's number as well as the total number of frames in the animation. Next, you see the current frame's delta size and the average delta size for all of the animation's frames.

Delta size is the amount of change (in bytes) between the current frame and the next frame in the sequence. The larger the number, the slower the transition between this frame and the next frame will be. Naturally, the faster your Amiga, the faster your frames will be displayed.

Let there be Sound

Located on the bottom section of the FRM INFO panel are the sound controls. There are four basic sound settings. First is the CHANNEL setting. There are four sound channels for sounds, two for each stereo channel. There can be four different sounds started at any frame.

The only sound file format currently supported by *AWorks* is IFF 8SVX. Sound can be played in five modes - CHANNEL SILENT - no sound, FOREGROUND INT - plays the sound one time every time its frame is displayed, FOREGROUND PRI - the same except any sound currently playing on the same channel will not be stopped and the new

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AnimAFTER: The anim reduced in size to make 64 mini-anims on screen

sound will not play until the channel is clear, BACKGROUND INT and BACKGROUND PI - are the same as the Foreground options except that a sound is started at a specific frame and plays over and over.

The final buttons in the Frame Information Panel are the SET ALL, SET TAGGED and TEST options. All you have to do is select what frame to trigger your favourite sound effect. *AWorks* saves all the relevant information and writes the details into the anim file.

AnimBEFORE: An original anim frame

More Features

AWorks has many other talents. It allows you to GRAB any current Amiga screen image and instantly insert into an anim file, or analyse your anim with the HISTOGRAM tool. The software is also fully ARexx-compatible and comes supplied with several example scripts.

The manual is only 40 pages, but don't let that worry you. It describes all the program's features concisely, and with clear graphics. Oh yes, I almost forgot. Press HELP and *AWork*'s screen interface changes to another colour, so you can pick a colour of your choice to suit your mood.

The package is supplied on a single disk, and comes with the Commodore hard drive installation utility. One more amazing thing about *AWorks* is its price.

I have seen many Amiga graphics-related programs come and go over the years, but I think I can safely say, that like *Deluxe Paint, Anim Workshop* is one package that every animator should own. *AWorks* is A1!

Anim Workshop is created by Brian Wagner for Axiom Software. RRP $A99.95. Review copy supplied by Computa Magic, 44 Pascoe Vale Rd, Moonee Ponds 3039, (03) 326 0133. ❑

Dpaint Tutorial

A Roll of the Die

by Graham Bowden

Wouldn't it be nice to be able to use *Deluxe Paint*'s animation powers to animate in 3D. Two dimensional paint programs may have apparently meaty brushes when viewed in their flat perspective plane, but when rotated 90 degrees they disappear.

That's an unfortunate drawback inherent in any two dimensional product. On the other hand it's perhaps propitious that *Deluxe Paint* isn't a 3D package because such packages are notoriously slow at rendering a single screen, let alone an animation sequence.

However, I wanted to animate a cube in three dimensions and I wanted it to be more realistic than the cube animation exercise in the *DPaint* manual. Figure 1 shows what results when a 2D representation of a cube is rotated on its "Y" axis by 360 degrees over 12 frames. When the cube gets edge on it disappears. So much for attempt one at animating a cube.

Attempt two in Figure 2 employed *PhotonPaint 2* to create ten separate brushes, which were then laid down one frame at a time using *Deluxe Paint 4*'s LightTable to align the brushes directly over each other. A brush representing one face of the cube was imported into *PhotonPaint*, where Alt-3 was used to wrap the brush onto three sides of a cube.

The aspect of the cube can be adjusted with the mouse before rendering to produce, individually, the ten rotating dice brushes. These ten brushes were saved on one page as a picture, and when *DPaint* was started that picture was imported onto the spare page. Animation frame number was set to 10 frames and the LightTable was activated to allow accurate placement of the brushes frame by frame.

The LightTable, which appeared with the release of *Deluxe Paint 4*, is an almost essential tool for the serious animator. Known in some circles as onion skinning, it allows the viewing of up to four frames of animation at once.

There are several ways to activate the LightTable. Pressing Alt-A will conjure up the Animation control panel from which a click on the light bulb icon will activate it.

Another method, the quickest, is to hit "l" (that's lower case L) on the keyboard or one could always resort to the LightTable menu under the Effects menu. Once activated, selecting "P" from the control panel or Previous from the menu enables viewing the current frame and the previous frame. "2" shows the current plus the previous two frames and "N" displays the Next frame.

All three parameters can be selected simultaneously, together and at the same time to allow viewing of four animation frames at once. To avoid confusion it's usually preferable to leave the brightness setting in the Effects/LightTable menu at Dim. This ensures that any previous frames, although visible, are darker than the current frame. If you must, Alt-l will brighten the previous images. The "Next" frame cannot be dimmed. The "S" on the animation control panel will toggle the spare page view off and on.

Once set up with animation frames, LightTable set to "P" and spare page brushes, the "real 3D" cube animation began. From the spare page the first brush was picked up before returning to animation frame one and stamping it down. Moving to frame two with the LightTable active provided a dim view of the first frame. Stepping back to the spare page allowed the second cube to be grabbed as a brush before returning to frame two.

Figure 1

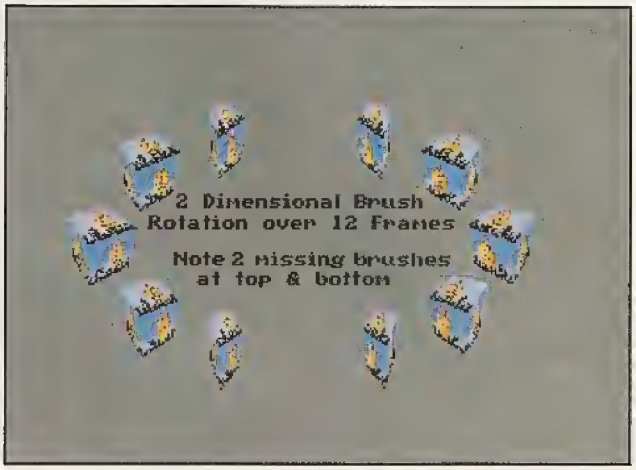
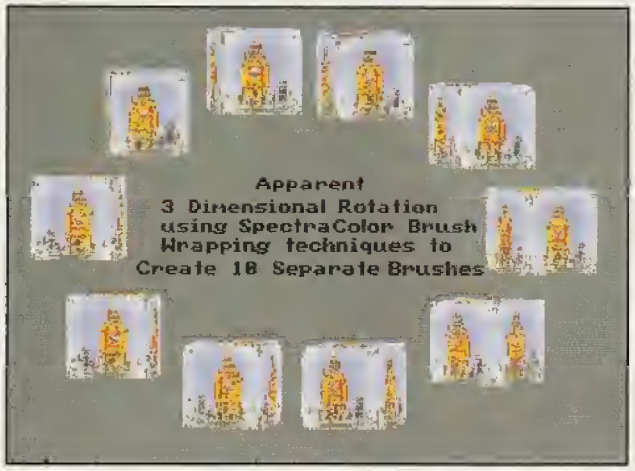


Figure 2



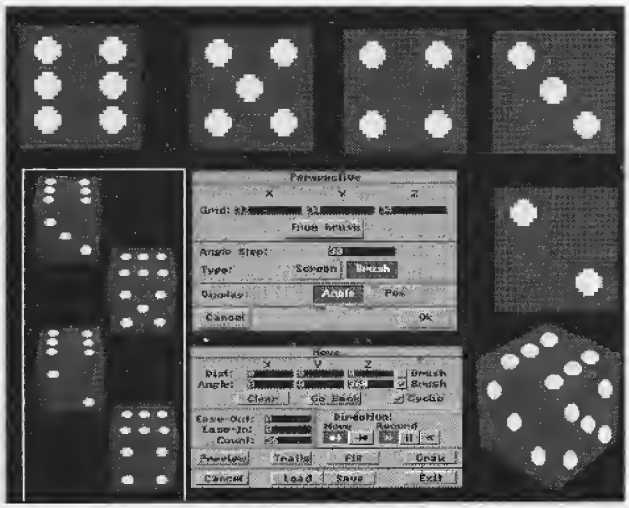


Figure 3

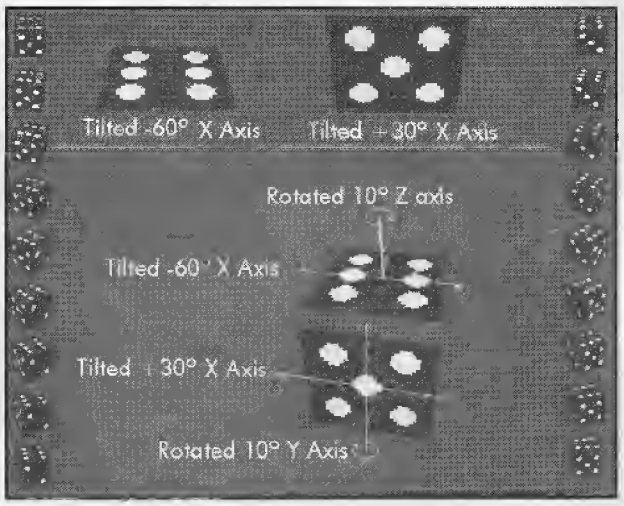


Figure 4

This second brush was aligned over the previous frame and stamped down. This process was repeated over the ten frames with each new brush carefully placed over the previous frame position. Now, while this method was all very convenient, valuable time was lost swapping from program to program, not to mention the time taken to render each of the separate brushes in *PhotonPaint*.

Clearly there was a need to find a way to draw and animate a cube using *Deluxe Paint* alone. 3D or not 3D, that was the question. Herein, frank and earnest artists, is the answer.

As the brush is to appear 3D, and as *DPaint*'s perspective mode is specifically designed to manipulate brushes in this dimension, the answer obviously lies in perspective animation. Using the method expounded below it's a simple matter to ensure the angle of the dangle equals the swing of the thing so a rotating cube really looks like a rotating cube.

For our exercise we'll animate a dice. Well, a die really, dice is the plural and, to quote Elmer Fudd, once one's wendered we can wapidly wender sevewal fwom it. And so we will in a future article.

For now, however, five die faces need to be drawn, as that's all that will be needed for this lesson. The sixth side will never come into view. These five sides are stored on the animation Scratch - read Spare - page and 36 frames will need to be created for the animation.

Pick the "six" brush up for the dice (die) top and enter Perspective mode. Call up the Perspective requester and set "Angle Step:" to 30 degrees and "Type:" to "Brush" (see the Perspective Requester in Figure 3) and position the brush directly over perspective centre. Two taps of <Shift>-7 (numerics keypad remember) will tilt the brush back to -60 degrees.

Now stamp it down over Perspective centre to locate it for the Move requester which will be the next feature used. Call up the Move requester and set it up as shown in Figure 3, click "DRAW" and the dice top will be rendered as a 36 frame animation. Playing the animation back reveals a rotating dice top which only needs sides to produce a realistic rendition of what we're after. Now, we need to get just a little technical.

The animation frame count was not set to 36 simply because it seemed like a good idea at the time. 36 was selected so that the dice would rotate 10 degrees between frames. 360 divided by 36 equals 10. This makes the maths simple. It means that every nine frames the top will have rotated 90 degrees, resulting in either the "X" or "Y" axis being aligned horizontally across the screen at these nine frame intervals.

That makes for easier side placement, because the four sides will have a "Y" axis angle of zero degrees every nine frames. 36 divided by nine equals four, there are only four vertical sides, so they will have an easily defined starting point every 90 degrees, as demonstrated in the boxed set of dice in Figure 3.

In Figure 4 we'll play with a few more angles. Frame one of the animation has the dice top situated as shown in the top left of Figure 4 and directly over perspective centre. After grabbing the "five" side as the next brush, step back into Perspective mode and call up the requester to check that "Angle Step:" is still 30 and "Type:" remains selected to "Brush".

Reset them if required.

When you're sure everything's correct, place the brush over perspective centre (which also happens to be over the dice top) and tap <Shift>-8 to tilt it 30 degrees forward. This, combined with the -60 degree angle of the dice top, produces the required angle of 90 between the top and side. There's still a small impediment to locating this side however.

Mouse movements move the brush along the "X" - horizontal - and "Y" - vertical - axes but we've altered the perspective of those axes. The "X" axis has now been rotated 30 degrees forward which results in a tilted "Y" axis. Any downward movement of the brush now will result in shrinking dimensions while upward movement will have the brush expanding as it moves outward along the perspectively altered "Y" axis.

The problem, if you're able to follow, is that the brush has to be moved

down the screen from directly over perspective centre (and the dice top) so as to align the top edge of the side with the lower edge of the top. If you have *DPaint* running as you read this it becomes painfully obvious that the lengths of these two sides are no longer equal. Fortunately the good designers of *Deluxe Paint* have allowed for "Z" axis movement.

Naturally everyone knows that "Z" axis movement is movement into or out of the screen and is accomplished in Perspective mode by tapping the semicolon ";" for motion toward the viewer (out of the screen) or the apostrophe " ' " to push the brush back into the screen. In this instance the brush needs to be enlarged so a combination of mouse movements and ";" key taps will quickly scale and align the edges and the brush can be stamped down.

Y-Rotation

The next step is rotating the side face on its "Y" axis as we progress through the animation frames. As Figure 4 shows, while the dice top rotated on its "Z" axis, the side, because it is at 90 degrees to the top, rotates on its "Y" axis but still, with 360 degrees rotation in 36 frames, by 10 degrees per frame.

To accomplish this, call up the Perspective requester again and alter the "Angle Step:" to read 10 degrees. Now step to frame two of the animation, rotate the side face clockwise 10 degrees by tapping <Shift>-4, adjust the brush size using the ";" and " ' " keys if required and stamp the brush down. Repeating this action through to frame nine will have half of the steps for this one side completed.

So far this face has been animated from zero to 90 degrees clockwise. That is from the central position - zero degrees - through to the left position - 90 degrees. We've yet to complete the animation frames from the right - 90 degrees - to central position but take heart, if you've kept up so far the rest is easy.

Press the numerics keypad "6" to reset the "Y" axis to zero and hit keyboard <Shift>-1 to step back to frame one of the animation. This next series of frames requires anti-clockwise brush rotation and backward steps through the animation frames. Use whatever means you're comfortable with to step back one frame then press <shift>-5 to rotate the brush 10 degrees anti-clockwise.

Adjust the brush in or out with the ";" and " ' " keys as before and stamp it down. Continue stepping back through the frames and adjusting the angle and size of the brush until you've completed the sequence. The dice down the left and right sides of Figure 4 should give a rough idea of this sequence of frames.

With this first side completed it's now a matter of picking up the brushes for the remaining three faces and using the same procedure to lay them down. Once all four sides are completed a little cleaning up and adjusting may be required around the edges and abutting sides, then a quick tap of the keyboard "4" key will reveal a reasonably lifelike rotating die.

Perhaps a little extra work with shadings may even produce lifelike shadows as the cube rotates. Those who really enjoy experimenting may like to try to use *DPaint* to animate the sides via the Move requester. I wish you luck.

Think of this ... adjusting the brushes in Perspective mode to set up the angles and sizes to match the top, then setting up the Move requester to rotate the sides a given angle over a given number of frames, is not the complete answer. Asking the Move requester to rotate a brush 90 degrees on its "Y" axis over nine frames will NOT produce the effect desired.

The sides, you see, do not simply rotate on their "Y" axes. They move along the circumference of a circle which has a diameter equal to the width of the brush if the brush is square. Without becoming too long-winded, let me say it is possible to automatically animate the sides.

The problem requires a couple of simple math equations to be solved but even then the brush needs to be moved along the "X" and "Z" axes as it rotates.

Contact me via this magazine if you'd like to know more. Next time we'll manipulate our dice as an AnimBrush for some special effects. ❑

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AMOS Column

by Wayne Johnson

We have something a little special this month. Not only are the AMOSPro v1.1, AMOS 1.35, Compiler 1.35 updaters available, but as I promised last month, we have a quick interview with Francois Lionet, the guy who put the whole AMOS language together. Thanks all for the feedback and calls during the day. Your suggestions have been helping greatly.

Amiga 1200/4000 Compatibility

Just bought one or considering it? As you know, the AGA Amiga boots up as a default in AGA mode. In this mode it is possible to have a hires pointer (same resolution as the Workbench screen), and up to 256 colours on the Workbench. Now, the rule is this: as long as your mouse pointer is set up as lores and your workbench contains only four colours, AMOS will boot and work normally. However, pressing the left Amiga and A keys will switch you back to the Workbench, and pressing these keys again will return you to AMOS again but the graphics will become distorted.

It may sound stupid but as long as you don't need to go to the Workbench for any reason, AMOS will be happy. If you have a screen blanker in the background, it will remove your pointer and you will need to go to the Workbench and so, AMOS crashes.

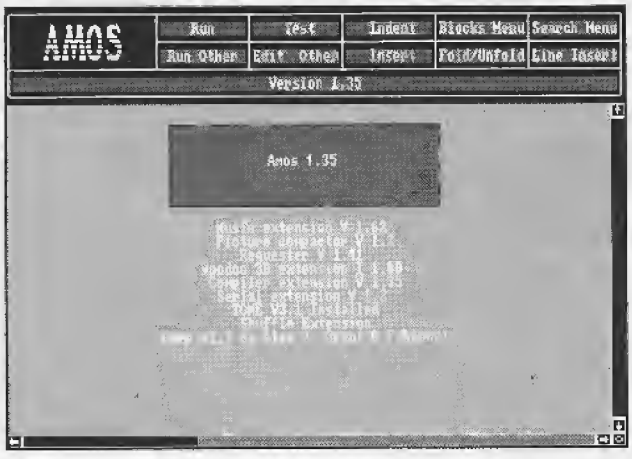
You can live with this or get the AMOS 1.35 updater for AMOS The Creator users or the AMOS Pro v1.1 updater for Pro users. Also available is the Compiler updater v1.35.

AMOSPro Update

There's quite a major change from AMOSPro v1.0 and v1.1. You find it all below. If anyone needs the update quickly, it is available on Predators BBS (02) 604 6644 or the Amiga File Server (02) 876 8965, otherwise, contact the AMOS Club at PO Box 253, Rydalmere NSW 2116 to order the update. Catalogue disk v1.2 is now finished, fully AGA compatible, and has had a few new things added. Please note that the new Compiler 1.35 updater is not the official Pro Compiler release. It is is simply an AGA Amiga compatible compiler.

AMOSPro PD

The club is opening a new PD section for programs written with AMOSPro. If anyone has written anything in AMOSPro and wants to see it spread around, give me a call on (02) 748 4700 and we will discuss exchanging for some PD.



Features added to AMOS Professional

- AMOSPro now works on AGA machines (1200/4000). You can now launch AMOSPro from the Workbench on an AGA machine, and flip between AMOSPro and the Workbench. AMOSPro does not yet exploit the new resolution modes: we are currently working on it. Version 1.2 is to be released later this year.
- AMOSPro now works with a screen blanker. A screen blanker can work under the Workbench without causing problems with AMOSPro. When AMOSPro is displayed it sends fake mouse movements every five seconds simulating a user input. The file selector has been vastly improved.
- Full Multitasking: the input/output of the file selector is now handled by a separate task. You can safely type in a file name while the directory is being read.
- STORE slider: instead of this button's old effect of displaying random directories, you are now presented with a list of all the stored directory pathnames.
- The Right mouse button now has an effect. This was originally in AMOS and Easy AMOS: click the right mouse button and you'll get the current device list displayed in the file selector. Click again and you'll receive the assign list, click another time and you'll get the stored list of directories, and another time brings you back to the directory you started from.
- Testing speed has been improved.
- The testing process has been rewritten, and is now up to 50% faster (usually 30 to 40% on a 68000 based Amiga).
- You can now configure your own default screen. Getting bored with the orange lores screen? You'd prefer it to be Workbench grey, hires

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Mike's Message Board

We are now open on Saturdays 9am-1pm- so feel free to drop in and see us sometime. We will also be at the World of Commodore show this year (with lots of goodies on hand) so take my word for it folks, this will be an event not to be missed.

Hot Software

- Final Copy II UK version
- SoftFaces Vol 1-4
- Deluxe Paint IV AGA
- PageStream 2.2 Power Pack - with 47 fonts.
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- Pro Page 4.0 / Pro Draw
- Vista Pro 3.0
- ProWrite 3.3
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- Ami-Back Tools
- Alladin 4D
- ImageFX
- Art Department Pro
- Morph Plus
- Scala MM210 AGA
- Directory Opus V4
- PC-Task - now with VGA display modes!
- LinkUP - Transfer data to and from a Sharp Organizer.
- PowerCopy Professional
- Broadcast Titler II SHR
- SAS/C V6 Dev. System
- True Print 24
- Real 3D V2
- Real 3D Classic
- Brilliance - Awesome HAM8 Paint Program
- TypeSmith - Professional Outline font Editor.
- Caligari 24
- Migraph OCR Software
- Bars & Pipes Pro V2

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interlaced and overscanned? No problem, just set it up using the new options in the Interpreter_Config.

AMOS program

You can now configure the Amiga-A key combination. Up till now there has been no choice, Amiga-A was the only way to flip between AMOS and the Workbench. Now you can define your very own key combination such as Left Amiga + N like normal Amiga Workbench screens.

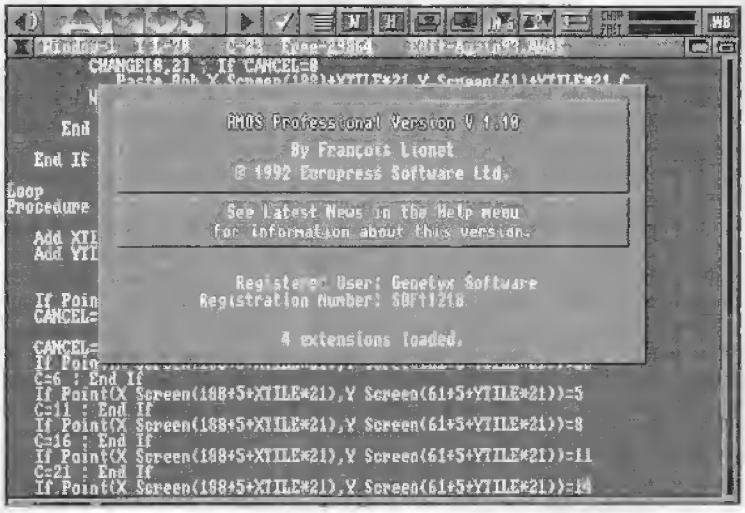
AMOSPro used to open a small screen at the bottom of the Workbench display to do its graphic work. Some users have complained about this (and rightly so). It has now been removed. In fact the entire screen system in amos.library has been totally re-written so that it is much more system-friendly.

- It is now possible to relocate the mouse pointer when in direct mode.
- If you have lost your mouse pointer (it's off the screen or you've hidden it), just press the <HELP> key and the mouse pointer will appear in the top-left corner of the direct mode window.
- Closing the last window now also gives you the option to quit the AMOSPro editor.
- The disk manager now copies and formats high density disks on an Amiga 4000. The debugging monitor does not single step through closed procedures anymore. This allows much faster debugging.

Printer device now sends its requester to AMOSPro and not the Workbench screen as it used to do. You can now use the 3D and Compiler extensions within AMOSPro. This will not allow you to compile the new Pro commands, it is still the only compiler (1.34 upwards is needed). The Pro compiler should be available within the next few weeks.

Bug Report

The equate system now works fine. Machine language procedures used to have difficulty accepting more than one parameter. ERRN now returns the proper error number.- ERR$ returns the good error message. Track Loop On / Off now works. On Break Proc works. LPrint does not leave the printer device open: you can now do a LPrint and then a Printer Open.



The testing process does not report an error with the following line: If A$="" And B$="" Then ... Mid$, Left$, Right$ as instructions are now corrected. Monitor - Now works in interlaced mode.

Pressing HELP while a program was run used to mess up the system. You cannot evaluate any more the command =FSEL$() and any special functions. They used to cause funny effects! Marking an array without marking the indexes used to crash.

Used to crash when accessing the program slider of a very small listing. Expression evaluation problems removed.

File Selector - Default name now works. The slider used to be badly positioned with a small number of files.

Editor - A random line number used to be displayed in the Edit / Direct window after an error. Stupid bug this one. Sorry.

Blocks do not include random characters any more. A program which included extension commands that weren't available used to crash. The User menu add and delete options now work fine. Autosave sometimes appeared for no reason.

You can now record a macro over an existing one without crashing. You can now remove a keyboard shortcut. Shift+Space does not produce a line of garbage any more. The Insert/Overwrite button now indicates the current state.

Direct Mode - BStart and BLength used to crash History buffer system corrected. EDIT now works. RUN now works.

CONTROL-C does not crash any more. Dialog boxes do not grab all the keyboard inputs anymore.

Object Editor: when grabbing a bank from the current program, the hotspots are not lost any more. The default font for any AMOS screen is now Topaz 8, whatever the default Workbench font is. EDialog reports the correct number.

Corrections to the User Guide:

- Page 08.01.01 - The second line of the program listing should read:

Flash 1,"(FFF,1) (000,147) (A5F,2)"Page 09.01.09

- Line five of the second listing should read:

A$=A$+"RU 0,%1100, wait for either a mouse click or a key press"Page 09.02.06 - The JmP command is in fact JumP.

Interview

Francois Lionet

Francois kindly agreed to interrupt his BUSY schedule and answer some programmers' questions for us. AMOSPro is going to become a bigger and bigger product. There's a heck of a lot on the way over the next two years, and I asked Francois the most common questions in AMOS programmers' minds:

WJ: Will AMOS be continuing on the Amiga for the next five years or will you move to the PC?

FL: BOTH! I will, of course, stay on the Amiga and make AMOS evolve in a proper way: AGA, better Intuition support ... Well, I will finish the AMOSPro Compiler, and then my employee will take care of AMOS.

So I tell you: one person is going to work full time on AMOS, just beside me! So be ready to have a lot of new products for AMOSPro for the next months: interface builder, Intuition extension ... I will personally move to the PC as soon as the Pro compiler is over. A friend of mine has started to work on the PC since January. We expect the PC product to be finished for September '94.

This product will be much more modern, object orientated etc ... So ideally, I would like to come back to the Amiga and port the main features of the PC product back into AMOS.

WJ: Why wasn't Intuition put into AMOS from the beginning?

FL: Intuition was not put into AMOS from the beginning because Intuition V1.3 was just not exciting at all! Ugly interface, (AMOS 1.3 interface was also ugly, I agree!) slow screen handling. At that time, chip poking was the only OFFICIAL, supported by Commodore, way to achieve graphic effects with an Amiga.V2.0 of Intuition was better, but no screen effect could be achieved with it. It is only with V3.0 that you can consider writing usable games using Intuition.

You must also keep in mind that AMOS was to be a GAME creator at first. It is the user who has decided to make it do other things. I still consider that it is difficult to write serious applications in AMOS. AMOS is the best for multimedia purposes (at least 10 French companies are using it to create multimedia screens in shops), educational software ... and fun!

AMOS is also very good for CDTV development: five titles have been written in AMOS so far.

WJ: What inspired you to go with the Amiga when there's a huge market elsewhere?

FL: The PC market was not that huge at that time: it was office only. It is only now that the PC game market is growing.

WJ: What did you do to get AMOS published?

FL: In fact, before AMOS, was STOS, the ST version. We got it published in France, and only sold 188. Then we went to see Europress Software (Mandarin Software at that time). Mandarin asked for many modifications to the product, and that was it!

WJ: When did you first start programming? What age? What was the first program you ever wrote?

FL: I started programming at 17, when I began my vet study. My first computer was a 6502 board, very exciting (in 1981) with 4k, a build-in keyboard and a cassette (Superboard II from OHIO Scientific). On this computer, I had a lot of fun, I wrote many games: Galaxian, tennis, Defender, using my home-made assembler! Then I had an Oric (6502), Amstrad CPC 464, CBM 64, PC, Atari and finally Amiga!

WJ: Did the fact that AmigaBASIC was so appalling influence your decision to write AMOS?

FL: Of course, AmigaBASIC was one of the reasons why I decided to write AMOS. The other reason was the potential of the machine, which was amazing!

WJ: Are you married? Do you have brothers and sisters? Are any of your relatives interested in computers?

FL: I have been married for three years now, my wife's name is Carine. We have a baby boy named Christopher, who was born on May 10th 1992. I have a dog called Daisy, who is very keen on helping me writing this software. I have two brothers, one is a dentist, the other is a cardiologist in Tahiti!

My wife does not understand anything in computers! She cannot even find a name in the electronic phonebook (minitel, that we have in France), and I can tell you, that is simple.

WJ: What programs have you written in the past other than AMOS and STOS?

FL: I have written many programs in the past: many games for the Oric, that you don't know, many games for the CBM64 that were total flops. You might know these ones: I have done the PC and CBM64 versions of *Captain Blood.*

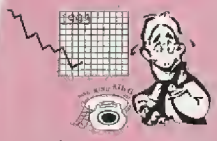
WJ: How many lines of assembly code and man hours was involved in creating AMOS?

FL: AMOS is about 100,000 lines of assembly, and took 13 months to program. I have not counted the manhours, but say it might be around 3000 or so.

WJ: What's planned for the future? Will you continue to write languages or will you end up doing something completely different?

FL: Well the future is: AMOSPRo compiler, then PC product, then ... no one knows. May be back to the Amiga, or CD roms or retirement!

Back to normal next month. Who wants a to write a tile system without owning TOME? I'll show you how a month from now. ❑



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What's new.

Well it's back to the ald farmat of a news letter.
I have been to the WOC in New York in March and the biggest thing I naticed was the lack of enthusiasm for the A500-2000 series.
Of interest was the supposed AGA Upgrade Board. A beta version that I saw running seemed to work well BUT at a price of US$999.00 (A$1600.00)
A much better way ta get AGA . . . go 24bit with the RETINA card. This card allows you ta display up ta 2048 x 2048 res on the Workbench screen in full 24 bit, with full anti-flicker capabilities. The cards came with up to 4Meg af Videa RAM fram $895.00. That, methinks, makes better sense than the AGA upgrade.
The most impressive item I saw in New York (aside from the 4000 Tower) was the Emplant stand, with a crowd, 10 deep, having a look. Thank gaodness that the board warks fine naw. All software bugs seem ta be fixed and at last I can sell this great board again.
At $699 the EMPLANT is excellent value and Amitech was able ta secure Australian rights to import and service this praduct.
CSA has launched a NEW A1200 product. A 50Mhz acceleratar with a 50Mhz "882 and raam for a RAM/Clock and SCSI cantraller. At $1395 this will make your 1200 run faster than a 4000 in many ways.
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All the best and see yau at the WOC in Sydney. Rab.
PS There wos an errar in the price af the VOIDAX II modem last month . . . it should have been $645. A very good price for a brilliant modem!

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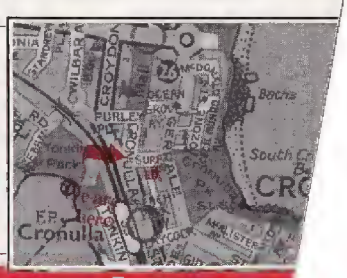

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For Beginners

Andy's Attic

Exploring WB2.0

by Andrew Leniart

Last month we began exploring the contents of the WB Tools Drawer and had a bit of a fiddle with IconEdit. We conclude our look at IconEdit this issue and take a look at some of the other bonza utilities which came with the upgrade.

IconEdit Continues

Ever wondered how some magazines create those fab looking disk icons for their disk magazines? The hardest part if you're not much of an artist is creating the actual shell or shape of the disk. I remember agonizing over this task in *Deluxe Paint* for what seemed like endless hours a few years ago when I was compiling disks for PD libraries. What I wouldn't have given at the time for a decent icon editor that had the ability to load in existing icons and allow me to modify them to what I wanted.

IconEdit allows you to do that and more. Simply load in any .info file which takes your fancy and modify it to your heart's content. You then have the option of saving it as a Disk, Project, Tool, Drawer or Garbage icon. Even better, you have the option of saving the image as an IFF brush, so you can load it into sophisticated paint programs such as *Deluxe Paint*. There you can make intricate changes which are not possible in IconEdit and load the brush back in to change it back into an icon file. By the same token, load in any IFF pic or brush which you like and turn it into an icon. It's all made possible with the pull down menus in IconEdit.

IconEdit rivals similar utilities in public domain circles. So if you've been using a PD editor to manipulate icons with, do yourself a favour and take a look at the new IconEdit program. You're in for a few nice surprises.

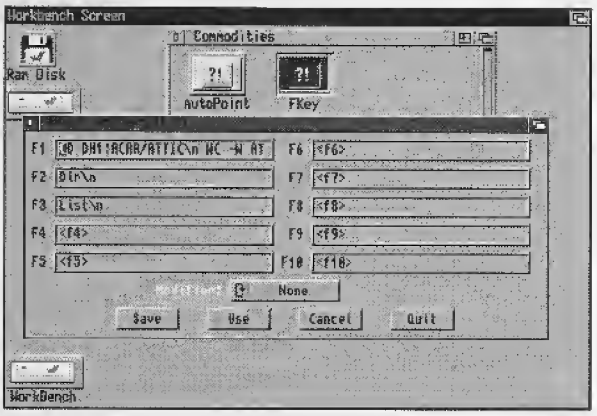
What's a Commodity?

The introduction of a Commodities Drawer and handler to WB2.0 seems to have caused confusion to many Amiga owners. A look in the Oxford Dictionary gives a meaning of "Useful thing; article of trade". Well, I guess it's kinda right. Commodities are certainly useful, but tools of trade? Nah ... A better explanation: A commodity is basically a program which is useful in enhancing your Workbench or Shell working environment. These programs do all sorts of nifty things like allowing us to pop up a CLI window by the press of a couple of keys to things like being able to assign function keys to perform certain tasks for us with the press of a single key.

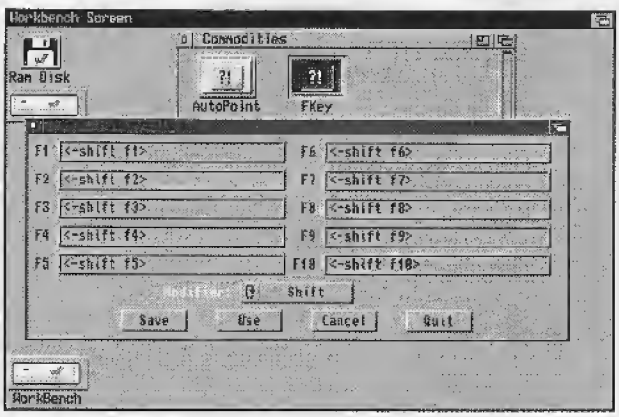
You can already find many of these little gems written by PD/ShareWare authors in the public domain libraries and as time goes on, so will the amount of programs grow and become available to us. This statement is as true as saying computers will continue to be developed and operating systems will be enhanced. Trust me on this one.

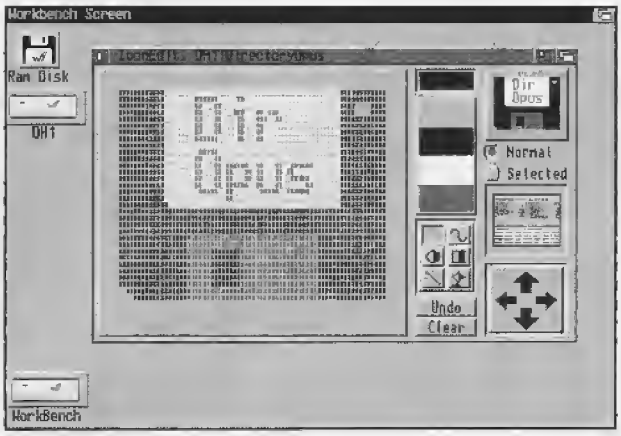
We'll be looking at some particularly useful PD commodities as they become available in future issues. For the time being, however, let's take a squiz at a few that Commodore sup-

Using F Key to define your own hot keys



F Key allows for keyboard modifiers such as Shift and Alt





Icon Edit is vastly improved over the workbench 1.3 version

plied to us with the WB2 upgrade and see if we can work out how and why they may be useful to us.

Commodities Drawer

Find the Commodities Drawer in the Tools sub directory of your Workbench disk. In there, you'll find about a half a dozen of em. Let's have a look at them.

NoCapsLock

Ever been frustrated by that annoying little Caps Lock key on the Amiga's keyboard? If you do a fair bit of word processing or typing, be it letters to friends or family, school assignment or whatever, then I would bet that quite a few of you would answer yes to this question. I know it's frustrated this little black duck more times than I care to admit!

Recognize this scenario? There you are typing away madly in the wee hours of the night trying to get your school assignment done in time to get a few hours of shuteye (or in my case, trying to make sure I get this column finished before the deadline ... err ... just kidding Mr Farrell, I do them in plenty of time ... honest) and you end up with sentences or worse, paragraphs that loOK SOMETHING LIKE THIS BEFORE YOU REALIZE THAT YOU'VE ACCIDENTALLY HIT THAT BLASTED CAPS LOCK KEY, making you backspace over everything you've typed and type it in all over again? Arghhhh!

Of course, a simple solution to the problem is to grab a pair of pointy nosed pliers from the garage and yank that troublesome little blighter out of the keyboard just like a dentist gets rid of an annoying tooth for you. Problem solved! Well, a solution it might be, but not a desirable one I'll admit.

Enter the NoCapsLock Commodity to the rescue. Double click on this little gem and your problems are solved. What it effectively does is temporarily make that key non existent so far as the Amiga is concerned. You can now accidentally hit it as many times as you like and the Amiga will simply ignore the press of it completely.

If you find that you need it again, simply double click NoCapsLock icon again and it will be deactivated. Works great and is a commodity I now use each and every time I write an article for ACAR.

AutoPoint

This one is also a goodun, especially for those that have a few windows and multiple CLIs open on their Workbench at the same time. So what's it do?

Quite simply, it makes any Window or Shell ACTIVE immediately the mouse pointer is over the top of it. Normally to make a window active you need to put the mouse in the window and then click once. The need for this click is eliminated when running AutoPoint. Check it out, it really works and does save time.

Blanker

Yup, you guessed it matey, a screen blanker is what it certainly is. Well okay, okay, so it hasn't got any of the bells and whistles that other available PD screen blankers boast like winged toasters flying around on your monitor or fancy lines scrolling around on the screen, but heck, who needs them? All we want to do is blank the screen when there is no activity to help preserve our monitor, right?

Double click it and you'll get a small window asking you how many seconds you wish to pass before it blanks your screen for you. Specify the amount of time desired and click on the HIDE gadget to make it do its stuff. Alternatively, you can also select Hide from the pull down menus to achieve the same result.

Get rid of it by pressing SHIFT-F1 to bring the window back up again and either click on Quit to kill it or select Quit from its pull down menu to achieve the same result. Simplicity itself and so it should be for a little proggy like this.

A final note on this one. Blanker will default to 60 seconds each time you start it up for the first time. To change this default to your own preferred time, edit the icon's Tool Type by clicking on it once to highlight it and then pressing "Right Amiga-I" to bring up the icon's information screen.

Now if you prefer 90 seconds instead of the default, edit the SECONDS=60 to say SECONDS=90 and save the changes. From there on, each time you fire it up, it will already have 90 seconds as the default blanking time. Neat huh?

ClickToFront

Got a troublesome rodent (more commonly known as mouse) that's a tad jerky and hard to aim? ClickToFront may save you some time and frustration by not having to locate your pointer on a window's depth gadget to move another window to the front.

Double click this little sucker and from there on, all you'll need to do to shuffle windows around is place your mouse pointer anywhere within the window and double click the left mouse

button while holding down the selected qualifier key. What's a qualifier key you ask?

A qualifier key is simply a user (that's you!) selected key, usually either the Shift, Left or Right-Alt or Ctrl key on your keyboard which is held down to initiate the action of any number of utilities including this one.

ClickToFront defaults to the Left-Alt key as its qualifier when fired up, however you can change this in the tool types section of its icon to use the Right-Alt key or Ctrl key instead as its qualifier. Change it in the same way you changed the seconds value in the Blanking commodity discussed earlier.

Fkey

This is yet another little gem and potential time saver. What it does is allow you to assign any text which can include Workbench c: commands to any one of your Amiga's ten function keys. By using the Modifier gadget in Fkey, it is possible to assign 20 different functions to your ten function keys by pressing the SHIFT key before pressing the Function key you wish to use.

This is a bonus to people like myself that use the Cli/Shell a fair bit and saves quite a bit of key bashing to achieve complicated tasks. For instance, I use a PD word counting utility called WC to count the number of words when writing my column to keep its finished size as close as possible to the size stipulated by ACAR for each issue. To do this task, I've made my F1 function key perform the following task for me in a shell:

1. Change to the work directory I write the column in.

2. Count the words present in the column I'm currently writing and report on how many there are all in one key press.

The F1 function key in Fkey is configured like so:

CD DH1:ACAR/ATTIC\n WC -W ATTIC14\n

So by simply flipping my open shell window to the front of my text editor, I can just press F1 and get the following report on the progress of this article. "Attic14 has 1448 words at this time".

Works great. Now with a little bit of thought and imagination, you can use this great little commodity to save you heaps of typing time in all sorts of applications. Have a play with it. Just double click the Fkey icon in the commodity drawer and start configuring.

Ihelp

The last commodity with which Commodore supplied us is Ihelp. Its purpose is to allow you to use your keyboard rather than your mouse to perform certain functions with windows that you would normally do with your mouse. Handy for those that get annoyed at having to chop and change from mouse to keyboard all the time.

Started by simply double clicking its icon, it also uses your Amiga's function keys (F1 through to F5) to do the voodoo, which it will do, so well.

F1 works only with application windows such as those opened by other programs and does not affect the normal Workbench windows in any way.

F2 makes "any" active window go to its full size while F3 does the reverse and will shrink the window to its minimum size.

F4 on the other hand shuffles screens for you if you have more than one open and will bring the screen at the very back of the lot to the very front.

F5 will perform a ZOOM function on any active window in the same way as if you had clicked on the windows Zoom gadget with your mouse.

Also worth mentioning here is that the (F1 through to F5) function keys Ihelp uses are simply the ones that it defaults to as supplied by Commodore. You can change this quite simply by highlighting the icon, pressing Right Amiga I and once again editing the icons Tool Types values to reflect which function keys you would prefer to use for any of the above Ihelp functions. Quite a neat commodity, methinks. No?

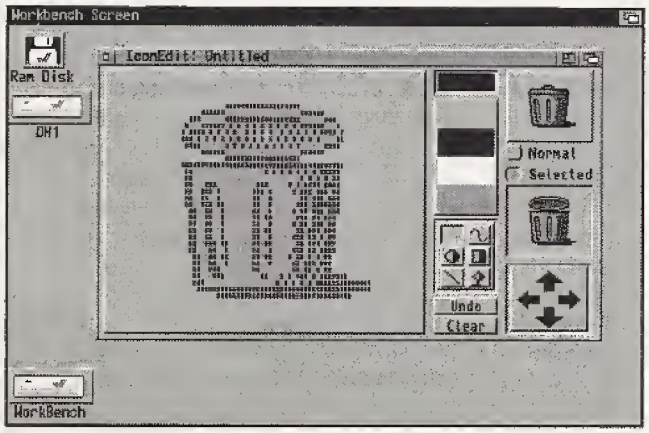
Concluding

Well, I certainly hope that what I've written here clears up some of the confusion some of you have been experiencing, and explains to you what commodities are and how we can use them to enhance our work environment. If it hasn't, feel free to write in and specify what it is you don't understand. We'll soon have you sorted out via Andy's Attic pages one way or another.

That wraps up yet another month of Andy's Attic. Next issue, you can look forward to more information on how we can control and manipulate Commodore supplied as well as PD obtained commodities via yet another program supplied with WB2.0 called Commodity Exchange. We'll also explore other aspects of our new operating system. There are tons of new things to play with in this release of WorkBench so don't be shy.

If you ain't got it yet, get out there and buy it. If you have got it, then fiddle. It's a great way to learn more about your favourite hobby. Till next time. ❑

You can easily create simple icons of your own to replace the standard Workbench versions



You Can CanDo

Your Own Directory Utility

Part 2

by Greg Abernethy

Continuing on with last month's tutorial, I will be adding some features to the Directory Utility, including the copy, delete, move, makedir and rename functions, as well as a Picture, Brush and Icon viewer, a Sound Player and a Text File viewer. Some scripts require editing to accommodate the new features. I'll deal with these first.

Editing the Document Scripts

The "Left" and "Right" Document scripts are as follows;

```
"Left" Document CLICK Script
WorkWithDocument "Left"
Do "CurrentSide",1,0
Let Current = "L"
If LeftDir <> ""
   SetCurrentDirectory LeftDir
EndIf
Let line = TheLineNumber
MoveCursorTo STARTOF LINE
If TheCharacter = "*"
   Delete CHARACTER
Else
   If TrimString(TheLine) <> ""
      Let f = TrimString(TheLine)
      WorkWithDocument "LeftInfo"
      Do "FileInfo",f
      WorkWithDocument "Left"
      Type "*"
   EndIf
EndIf
"Right" Document CLICK Script
WorkWithDocument "Right"
Do "CurrentSide",0,1
Let Current = "R"
If RightDir <> ""
   SetCurrentDirectory RightDir
EndIf
Let line = TheLineNumber
MoveCursorTo STARTOF LINE
If TheCharacter = "*"
   Delete CHARACTER
Else
   If TrimString(TheLine) <> ""
      Let f = TrimString(TheLine)
      WorkWithDocument "RightInfo"
      Do "FileInfo",f
      WorkWithDocument "Right"
      Type "*"
   EndIf
EndIf
```

Explanation: There are not many changes to this script, other than adding a section to display information on the currently selected file. When the user clicks on a file or directory, information relevant to that file is displayed in a document under the directory window. (See the "FileInfo" Routine for more information.)

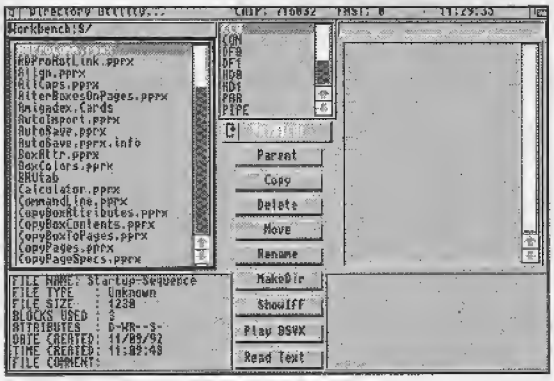
```
"Left" Document DRAG SCRIPT
If TheLineNumber <> line
   WorkWithDocument "Left"
   MoveCursorTo STARTOF LINE
   If TheCharacter = "*"
      Delete CHARACTER
   Else
      Type "*"
   EndIf
   Let line = TheLineNumber
   PositionOnLine line + 1
EndIf
```

Explanation: I managed to work out a way to get the list to scroll the length of the directory listing. Simply add the line "PositionOnLine line + 1" to be able to select or deselect the entire directory listing. Repeat this for the DRAG SCRIPT of the "Right" DOCUMENT.

Creating the File Information Windows

The specifications for the two windows are;

```
LEFT FILE INFORMATION WINDOW
SPECIFICATIONS
DOCUMENT OBJECT NAME   "LIDoc"
DOCUMENT NAME   "LeftInfo"
DOCUMENT TYPE   Memo Document NO
TYPING
DOCUMENT ORIGIN   X = 7 : Y = 186
DOCUMENT SIZE   Width = 256 : Height = 64
BORDER   Double Bevel
RIGHT FILE INFORMATION WINDOW
SPECIFICATIONS
DOCUMENT OBJECT NAME   "RIDoc"
DOCUMENT NAME   "RightInfo"
DOCUMENT TYPE   Memo Document NO
TYPING
DOCUMENT ORIGIN   X = 378 : Y = 186
DOCUMENT SIZE   Width = 256 : Height = 64
BORDER   Double Bevel
NO SCRIPTS
Routine "FileInfo"
Let f = ARG1
If GetWord(f,1) = "[Dir]"
   Let f = GetWord(f,2)
EndIf
Let i = FileType(TheCurrentDirectoryIlf)
GetFileInfo TheCurrentDirectoryIlf,s,n,a,d,t,c
Clear DOCUMENT
Type "FILE NAME:"|||f,NEWLINE
Type "FILE TYPE  :"|||i,NEWLINE
Type "FILE SIZE  :"|||s,NEWLINE
Type "BLOCKS USED :"|||n,NEWLINE
Type "ATTRIBUTES  :"|||a,NEWLINE
Type "DATE CREATED:"|||d,NEWLINE
Type "TIME CREATED:"|||t,NEWLINE
Type "FILE COMMENT:"|||c
   MoveCursorTo STARTOF DOCUMENT
```



Explanation: This routine gets and displays information when the user clicks on a file in either directory window. Read the CanDo manual for a full description of the GetFileInfo command.

Creating the SubDeck

The SubDeck for the Directory Utility consists of two cards. One

Card is for getting user input for renaming files, and the other is for getting user input for making a directory.

I have named my SubDeck as "DirSub" and placed it in the same location as the main directory deck.

The Rename Card

The specifications for the window are;

```
WINDOW NAME       "Rename..."
WINDOW SPECIFICATIONS
X POSITION = 200 : Y POSITION = 100
WIDTH = 240 : HEIGHT = 65
NUMBER OF COLOURS = 4
DRAG-BAR GADGET
WINDOW OPTIONS
THE WINDOW HAS VISIBLE BORDERS
TRY TO OPEN WINDOW ON THE CURRENT
SCREEN
CARD SPECIFICATIONS
CARD NAME    "Rename"
AFTER ATTACHMENT SCRIPT
Let old = ARG1
SetText "Old",old
SetText "New",old
SetObjectState "New",ON
```

Explanation: The variable "old" contains the name of the file to be renamed. The name is displayed in the "Old" field and the cursor is highlighed in the "New" field.

Text Entry Fields

There are two fields for displaying and receiving information on the file to be renamed. The specifications are;

```
OLD FILENAME FIELD SPECIFICATIONS
Field Name = "Old"
Horizontal = 10  Vertical  = 15
Width    = 220
Border    = DOUBLEBEVEL
FieldType  = "Text"
Left Justification
No Script

NEW FILENAME FIELD SPECIFICATIONS
Field Name = "New"
Horizontal = 10  Vertical  = 37
Width    = 220
Border    = DOUBLEBEVEL
FieldType  = "Text"
Left Justification
Script
If TextFrom("New") <> ""
   SendToParentDeck"R",old,TrimString
(TextFrom("New"))
   Quit
Else
   SetObjectState "New",ON
EndIf
```

Explanation: When the user enters the new name and presses RETURN, the new and old names are sent to the Main Deck along with the argument "R" to identify it is a rename operation. If the user presses RETURN without entering a name no action is taken. (See the MESSAGE FROMSUBECK script in the main deck).

```
Cancel Button Specifications
Button Name = "Cancel"
Horizontal  = 83  Vertical   = 50
Border    = Shadow
Button Type = "Text"
Text      = " Cancel "
RELEASE SCRIPT
Quit

THE MAKEDIR CARD
The specifications for the window are;
WINDOW NAME       "Enter Directory Name..."
WINDOW SPECIFICATIONS
X POSITION = 200 : Y POSITION = 100
WIDTH = 240 : HEIGHT = 47
NUMBER OF COLOURS = 4
DRAG-BAR GADGET
WINDOW OPTIONSTHE WINDOW HAS
VISIBLE BORDERS
TRY TO OPEN WINDOW ON THE CURRENT
SCREEN
CARD SPECIFICATIONS
CARD NAME    "Makedir"
AFTER ATTACHMENT SCRIPT
SetObjectState "Dir",ON
TEXT ENTRY FIELD
There are one fields for receiving information on
the name of the directory to be created. The
specifications are;

DIRECTORY NAME FIELD SPECIFICATIONS
Field Name = "Dir"
Horizontal = 10  Vertical  = 17
Width    = 220
Border    = DOUBLEBEVEL
FieldType  = "Text"
Left Justification
Script
If TextFrom("Dir") <> ""
   SendToParentDeck "M",TrimString
(TextFrom("Dir"))
   Quit
Else
   SetObjectState "Dir",ON
EndIf
```

Explanation: When the user enters the directory name and presses RETURN, the name is sent to the Main Deck along with the argument "M" to identify it as a makedir operation. If the user presses RETURN without entering a name no action is taken. (See the MESSAGEFROM SUBDECK script in the main deck).

```
Cancel Button Specifications
Button Name = "Cancel"
Horizontal  = 83  Vertical   = 32
Border    = Shadow
Button Type = "Text"
Text      = " Cancel "
RELEASE SCRIPT
Quit
```

Save this deck and place it in the same directory as the main application. Replace the BeforeAttachment script to allow the loading of the SubDeck.

Reload the Main application and go to the MESSAGEFROMSUBDECK section.

```
MESSAGEFROMSUBDECK SCRIPT
If ARG1 = "R"
   Let old = ARG2
   Let new = ARG3
   If Current = "L"
      Dos "c:rename"|||Left
Dir||old|||"AS"|||LeftDir||new
      Do "ShowDir",LeftDir
   ElseIf Current = "R"
      Dos
"c:rename"|||RightDir||old|||"AS"|||RightDir||new
      Do "ShowDir",RightDir
   EndIf
EndIf
If ARG1 = "M"
   If Current = "L"
      Dos "c:makedir"|||LeftDir||ARG2
      Do "ShowDir",LeftDir
   ElseIf Current = "R"
      Dos "c:makedir"|||RightDir||ARG2
      Do "ShowDir",RightDir
   EndIf
EndIf
```

Explanation: If the user was renaming a file, ARG1 will contain "R". If the user was making a directory, ARG1 will contain "M". I use the Dos command "rename" to rename the old file with the new name. The directory listing is then redisplayed. The "makedir" command is used to create the requested directory in the current location.

Part 3 next month. ❑

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Education Review:

Word Construction Set

by Stan Nirenburg

I've been observing our young son developing his communication skills over the last few years. As a toddler, much of his communication was by pointing and showing by example. As he grew older, he started to use speech, which gave him a much better means of expressing his desires and ideas. At five, he still relies mostly on speech to communicate with the people around him. He has also become better at drawing, which has allowed him to explore the world around him through another medium.

His current challenge is to learn to read and write. The written language has been one of the cornerstones of modern civilisation: it enables us to express ideas and to learn from others without actually making physical contact; it enables us to learn about history and how things work and to express abstract ideas.

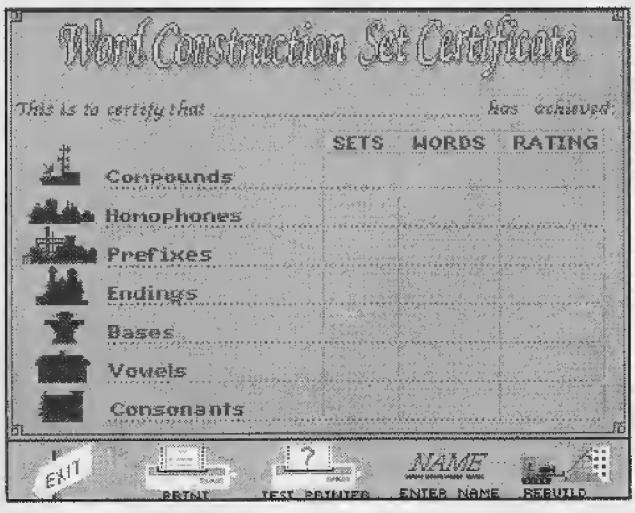
The use of both the written and spoken language requires us to have a useful and extensive vocabulary and to be able to use words in the correct context. In addition, to have our written ideas understood by others, it is imperative that we spell words correctly. This is where *Word Construction Set* comes in. It aims to assist students of English in word recognition, vocabulary skills and correct spelling.

Word Construction Set comes in a handsome box with a picture of workmen assembling a sign on the front. The program itself comes on three disks and is accompanied by a small but comprehensive instruction manual. Although the manual suggests that *Word Construction Set* can be run from Workbench, I had no success when I attempted to do so.

The program is not copy protected, although it does have key word protection - the user must look up a word in the manual and type it in before the program will start. The good news is that a backup of the disks can be made.

In theory, it should be possible to copy the program onto a hard disk, however no utility is provided for this, and since I could not operate the program from Workbench, this would be of little value - a bit of a pity. Despite this small shortcoming, the program operated well and was fairly fast in loading itself from floppy disk.

Progress Chart



Control of the program is simplicity itself - every aspect of *Word Construction Set* is mouse driven. This is well within the grasp of potential users of the package - it is aimed at students from about age seven. After coming to grips with the workings of the program with the help of the instructions, using *Word Construction Set* was a breeze!

Up and Running

Seven different sets of words are taught in *Word Construction Set*, each word type being represented by a building. The object of the exercise is to complete all seven buildings with as few errors as possible. Each building is made up of a number of stages of ten words and each segment gets progressively harder. As each word is completed, another brick or tile is added to the building.

The program presents the player with a pile of bricks with part of a word on each brick. The computer speaks the word that is to be constructed and the player must then choose the two bricks that make up the required word. The spoken word is further reinforced by a picture representing the word.

For example, a picture of a truck is shown and the word "truck" is spoken by the computer. The player must choose the bricks with "tr" and "uck" in the correct sequence to form the word. When the word is completed, the computer finishes off a sentence with the word - "Don's father drives a truck" in this example - to show usage and another part of the building is erected.

The user is given a number of tools to operate the program. The tools include:

CONSTRUCT - start or return to the exercise

REBUILD - repeat the exercise just completed

REPORT - shows a report of progress to date.

The report feature is a good idea as it plots the progress of the student and in addition can be printed for a permanent record.

A further set of tools is

available to help build the words:

TEST - tells the program to check whether you have constructed the word correctly.

LIST - allows you to review the spelling of the current word. Really useful if you get stuck.

SOUND - listen to the word again.

ERASE - lets you cancel your effort on the current word so that you can have another go.

For certain endings, the root word needs to be changed. This is done through the use of three additional tools:

DROP E - allows you to change "tape" into "tap", for example, for use in "taping"

DOUBLE - "tap" can be changed to "tapp" for use in "tapping"

Y TO I - "dry" is changed to "dri" for use in "dried".

All in all, a very friendly set of commands which allows the user to quickly master the interface and therefore concentrate on the game itself.

The seven areas of word and sentence construction that are covered include consonants (simple words with short consonant sounds), vowels (long vowel sounds, certain combinations such as OU and OW), endings (including plurals and verbal stems), compounds (e.g. "base" and "ball" to make "baseball"), homophones (similar sounding words such as pear and pair), prefixes (un, pro, milli, etc) and bases (words using Greek or Latin bases such as "arch"). Hundreds of different words are presented in the package, enough to ensure many hours of activity.

Problem Areas

One shortcoming of the program is the spoken sound. I find that the use of speech in educational software is a must, and this program is an excellent example of what can be achieved. In fact, it would be very difficult to have a spelling drill without someone or something speaking out the words.

The one weakness that I found was that the pronunciation of some words was so imprecise that the task of spelling the words became almost impossible. This is not a reflection on the programmers but rather on the speech synthesizer built into the Amiga. A more desirable approach would have been to use sampled sounds which would have guaranteed correct pronunciation.

However, this would have taken up considerable disk space given the number of words that are presented in this package and may only be practical in a CDTV version. I hasten to add that this shortcoming only manifested itself occasionally, and I could get around the problem by looking up the word list screen which can be accessed by a mouse click. The word list showed the current word being constructed and a picture representing the word.

Conclusion

Overall, a good program to help students learn English. The graphics are well drawn, though somewhat unexciting. The use of speech enhances this program enormously, despite the shortcomings I have discussed above. The use of pictures and the word list to help the student solve the problem makes life somewhat easier and less frustrating. However, the use of on line hints might have further enhanced the program as an educational tool.

Learning to spell and construct words and sentences is probably not the most exciting activity in the world. However, this program is aimed at children at the primary school level, and I think that at this age group the attention span will be

Word Construction Set

Publisher: Lascelles Productions
Distributor: Don Quixote Software
(076) 391 578
RRP: $69.95
Category: English Language
Comments: Good quality program that teaches youngsters the basics of spelling and word and sentence construction
Age Group: 7 plus
Rating: ****

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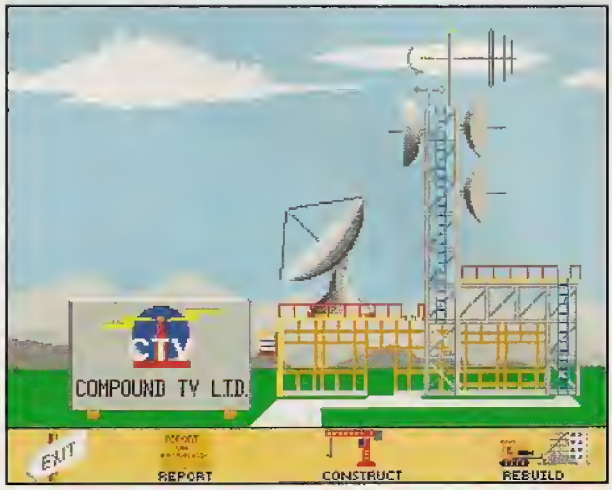
Word Construction Set



Construction Site

long enough to allow children to attempt to hone their word skills in small doses.

I think that *Word Construction Set* will find a place both at home and at school, and could be useful as a remedial tool. This is a well researched and polished product.

RRP $69.95. Published by Lascelles Productions and distributed in Australia by Don Quixote Software (076) 391 578. Other products published by Lascelles include *The Connoisseur Fine Art Collection* for CDTV, *Fractions!*, *Back To Basics*, *Look! Hear!*, *KIM* (a memory game) and *ClockWorks*. We will review some of these products in forthcoming issues.

As usual, please write in with your comments, questions, etc to me care of ACAR or directly to PO Box 136, Forest Hill, Vic, 3131. ❑

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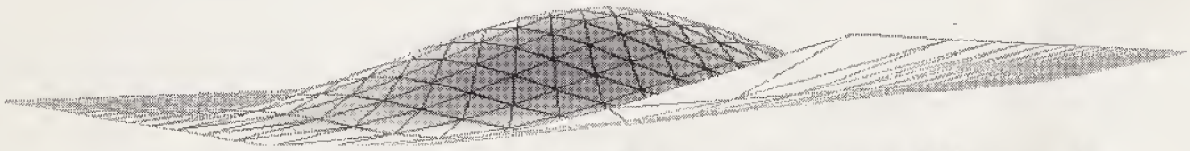

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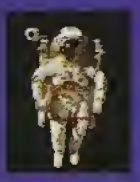

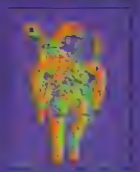

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Down the Opal Mine

by Robert Roy

Opal Technology - New Software

Hi there everyone! First some news, then we'll get down to a walk through of a practical uses of Alpha-Paint Mode.

I missed last month's column because I was overseas completing the Reference Manual revisions for V2.0 of the OpalVision software. There are far too many new features to mention, so it's a must-have upgrade. If you don't yet have a letter with your upgrade options then you probably didn't send in your warranty card, so give Opal Tech a call NOW.

New Hardware

By the time you read this the long-awaited video modules will be REALLY close. The Frame Grabber and Linear-key Genlock module, which also includes the Chroma and Luma Keyer, will now be called the Video Processor and will include the Roaster Chip. The external rack-mountable switcher with all the inputs and outputs for Composite, S-Video, RGB or Y/R-Y/B-Y and Audio will be called the Video Suite.

The Scan-Rate Converter will handle deinterlacing and provide dual Time Base Correction (TBC) channels for unlimited switching and mixing of non-synchronous video sources. A cut-down (and cheaper) scan-rate converter will also be available that does nothing but deinterlacing.

Contact OpalTech for more details, and make a date to come along to see us at the World of Commodore Amiga Show in Sydney, July 3-5. Please note that Opal Tech's stand will NOT be open on the Saturday.

Anyway, let's get down to business.

Gem of an Idea

To edit the Alpha Channel of a cutout brush, save the cutout brush (say to the RAM drive), create a new spare page and load in the cutout brush as an image. Edit the Alpha Channel using Alpha Work Mode, then re-cut the Cutout Brush with the "Use Alpha" option enabled.

Using the Alpha Channel

If 24 bits are great then 32 bits are even better, and *OpalPaint* includes full 32-bit functionality. The extra eight bits refer to a 256-level Transparency mask or layer, usually called an Alpha Channel, that can be created and edited using all of *OpalPaint*'s many tools, modes, gradients and other drawing features.

It is useful in at least three ways. Firstly, instead of using a single Global Transparency setting you can paint or process your image "through" the Alpha channel, effectively allowing you to predefine the transparency for every pixel.

Secondly, by specifying the "Use Alpha" option when creating a Cutout Brush you can tell *OpalPaint* to cut the 8-bit Alpha Channel along with the normal 24-bit image. This Alpha Channel will be used when pasting the cutout, so once again you are effectively pre-defining the transparency for each pixel in the Cutout Brush.

Finally, the Alpha Channel is invaluable when used with the Video Processor as an "Alpha Channel" or Linear Key. The transparency of a 24-bit OpalVision graphic, Amiga graphic or live video overlay to an underlying layer of live video can be defined on a pixel-by-pixel basis by the Alpha Channel.

Example

Let's look quickly at a practical example. You have been commissioned to produce a promotional video for Andy's Pale Ale. After an opening sequence that includes a glass of ale against Ayer's Rock, the agency wants to introduce short clips of young and interesting people doing interesting and youthful things as if suspended in the liquid. Realising the job will be a snack with OpalVision, you quickly agree and get to work.

First scan the client's picture of the ale glass and load the image into *OpalPaint*. A neutral, solid-colour background will give the best results. Now click on the "AL" button using the Right Mouse Button (RMB) to get to the Alpha Work Mode options menu, then select the solid red background colour (my personal preference, although you may prefer another).

The selected solid colour or grid background will be progressively revealed as higher and higher transparency levels are "applied" to the image. Click OK, and after a few seconds the coloured Paint-Pots will be replaced by a sequence of grey levels that represent transparency levels in the Alpha Channel overlay. White represents 0% or fully opaque, while black represents 100% or fully transparent. Now you can go to work.

Select a mid-grey Paint-Pot and click on the Trashcan using the RMB to "clear" the Alpha Channel to a uniform middle level. The image will now appear to be half hidden by a red sheen. Select white and the filled-freehand tool then carefully remove the mask over the glass using magnify if necessary. Now use the flood fill tool to replace all the mask outside the glass with black. This area will now appear to be bright red as the background is completely revealed - the image is completely transparent in those areas.

Now comes the tricky bit. Paint over the glass using lighter greys for the thicker or highlighted glass (less transparent) and darker greys for the more transparent parts of the glass. Don't forget to use a different grey for the filled and unfilled sec-

tions of the glass. Start with rough areas of solid greys, then use the Smear and Smooth modes to blend them together. When you have finished, click the "PT" button to return to normal Paint Work Mode. Save the image, making sure both the Picture and Alpha components of the image are included in the image file. Now for the title page.

Click on the Scissors icon using the RMB and select "Use Alpha", then cut-out the area around the glass. Open a spare page and load an image of Ayer's Rock, then select the cutout brush with the glass. When you paste down the cut-out it should be transparent in all the right places and show the background through the glass and liquid.

If necessary undo the paste, go back and edit the Alpha Channel then recut and paste until it's the way you want it. Also remember that you can resize the cutout if needed and that the Alpha Channel will also be resized. Add some text and the job is done.

For the video bits you can use a similar technique to edit a new mask over the composite image. This time you need only make a semi-transparent "hole" in the opaque Alpha Channel and carefully smear and smooth the edges. Now shoot some short video clips of people having the required fun time and with the framing arranged so they are right size and the right position in the frame behind the Alpha "window".

Finally Genlock the image over these clips using the OpalVision Video Processor. If the hole in the Alpha Channel is semi-transparent there will be a brown "aleish" base colour with the video displayed through it.

That should present you with lots of ideas for other Alpha experiments until you find something Beta (sorry, little ancient Greek joke there). I also suggest you check out the Alpha Work Mode section in the V2.0 Reference manual to find some useful background and another mini-tutorial that you should find edifying.

Please feel free to contact Opal Tech on (02) 899 4322 with any questions or comments. We are also keen to see your participation on the AmigaNet OpalVision echo at a BBS near you. Until next month, happy fossicking. ❑

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This new package contains the latest versions of all the utilities which have become famous in the Amiga world - NoVirus (was $50), AddMem (was $50), AutoCLI, TrackDos, NoErrors, Iinfo and many more. Exclusive to Megadisc $29.95.

The C64 Column

by Owen James

Did anyone notice? The C64 Column has just chalked up its third year in print. So where are the trumpets, streamers and dancing girls? I wonder that too, as I sit here alone wearing my home made party hat, drinking raspberry cordial and trying (unsuccessfully) to get a noise out of this whistle (fffffffffff). It's a pathetic sight, but a proud moment nonetheless.

So what have we covered over the past three years (besides the bottom of a few bird cages)? Well, we've looked at the possibility of a 64 virus, told you how to increase the speed of BASIC, mourned the death of the C64 Console in the UK, examined the new 'Super C64' rumours, accepted some bouquets and scoffed at a few brickbats. But even three years later there's still a lot to be said, so without further ado it's on with the show.

For the past two years Entertainment Software has been busily producing and selling C64 software in Australia. Their latest catalogue includes a large range of games, adventures and compilations, one of the most noteworthy being their Mega Games Pack which contains a staggering 380 games for just $39.95. They also have their own free newsletter containing details of the latest news and happenings in the world of Commodore.

For more information, call Entertainment Software on (065) 52 6991, or write to them at 21 Lawson Crescent, Taree NSW 2430.

MAIL

Datasette Dilemma

Kevin McCullough of Gympie Qld writes: "Dear Owen, I am writing to you to find out where to purchase either a datasette or a disk drive for my Commodore 64. Most of the software I own is on tape, with only a couple or so disks. Most of the datasettes I have are broken, and the one I am using now doesn't load the graphics of one game called *Championship Wrestling* correctly. I have tried to adjust the heads, and even tried using a program called *LoadMaster* to try to fix it, but the problem is still there."

OJ: The Datasette heads need regular cleaning and demagnetizing to stay in top form, but even then they do wear out to a point beyond easy repair. The only place I know of at the moment with C64 Datasettes is Code One Computer Services. They usually have them for about $49.95. For more information, call or fax Code One on (047) 57 3982, or write to 29 Toulon Ave, Wentworth Falls NSW 2782.

A disk drive would be the ideal way to go, but it's very hard to find new ones in Australia at the moment. You would also need to transfer your Datasette programs over to disk, so you may need some kind of Freeze cartridge such as The Final Cartridge III or Action Replay Mk VI.

These allow you to load your Datasette games, hit a button, and save them to disk. Of course you'll need access to a working Datasette in order to load the programs in the first place. The Action Replay Mk VI cartridge is also usually available from Code One for $130.00. Call or fax them for more details.

Which 128 Wordprocessor?

Joshua Lowcock of North Richmond writes: "Dear Owen, I have used *GEOS 128 V2* for the best part of a year but find it unsatisfactory to my needs. The main problem is all the fiddling it takes to set up and use, thus I bought *Easyscript 64* off a friend and use it instead. This probably illustrates how hassled I was by *GEOS*.

"Anyway, *Easyscript* is a waste of the 80 column, more memory 128D I own and I would like some ideas of a suitable 128 wordprocessor. I really need to be able to print the majority of printer codes, superscript etc. I also need it to be able to number pages automatically, have headers, a spell checker and word count. These are necessities. If it had a thesaurus and the ability to print in columns it would be a great thrill.

"I use the 128 extensively for university work and thus require a good WP ASAP (if it could read IBM ASCII files it would be good). Any suggestion you could offer would be appreciated, as well as a supplier. If someone reading this would be willing to sell their copy could they contact me. Or if they want to swap for *GEOS 128 V2* + *geoDEX* or buy my *GEOS* setup for about $70 neg. In the meantime I'll stick with *Easyscript*, without 80 columns and no spell chequer (see how my work suffers?).

"Don't suggest I buy a new computer. I cannot afford to upgrade just for a word processor. Some things I have had suggested are *The Fleet System, Paperclip 3, The Write Stuff 128*."

OJ: There are a few word processors I could suggest, but they are either no longer available in Australia, or are out of production altogether. The one that I'd be inclined to suggest is *Word Writer 6*. It offers headers, footers, spell

check, thesaurus, word count etc, but is for the 64 mode only. It does, however, provide an 80 column on-screen display. Logico usually has them in stock for approximately $80.00. You can call them on (02) 558 1884. If anyone is interested in Joshua's offer of *GEOS* for $70, write to him at 278 Terrace Rd, North Richmond NSW 2756 or call on (045) 79 6314 after 2pm on most weekdays.

For Sale

Scott Bevan of Greta NSW writes: "Dear Owen, I wondered if you happen to know if the two-disk version of *geoPublish* is in Australia yet. I am also selling *GEOS 2.0* for $50 and I will throw *geoPD* disks One and Two in for free.

"Do you know of anyone with a copy of *GEOS V2.0 128* which they would like to sell? Also, a Commodore MPS 1250 printer for sale. Includes manual, power, serial cable. Any offer around $115.00. Write to 38 Nelson St, Greta NSW 2334 or telephone (049) 38 7214."

OJ: I haven't heard of any more up to date versions of *geoPublish* being released, and I'm sceptical that we'll see any more *GEOS 64/128* products come out of GeoWorks (formerly Berkley Softworks). They're not producing any more copies of *GEOS 128* nor any 128-specific *GEOS* software, and many of their other lines have been dropped. However, it might just be your lucky day. See the above letter for a second-hand copy of *GEOS 128*.

GEOS Future

I've received a few enquiries recently about what *GEOS* products are still available. As mentioned above, all 128 lines are out of production, but there may be one or two retailers still with some limited stock. Code One (047) 57 3982 tells me they had the following available at the time of writing: *GEOS 64 V2* $62.00, *GeoCalc 64* $48.00, *GeoChart* $48.00, *GeoFile 64* $48.00, *GeoProgrammer* $54.00, *GeoPublish* $54.00. Some of these titles are now out of production, so it's a case of once it's gone, there will be no more.

For the sake of interest, GeoWorks is still very much alive as a company, but they are now concentrating on their impressive range of GeoWorks PC software for IBM compatibles.

And of course it's now time we had the obligatory 'whinge' letter, this month courtesy of DVS-D (better known to his mother as Paul Kuhnast):

64 Coverage ...

"Yo Mr 64, I'm catchin' a lot of bad vibes here from these C64ers. It's true that the C64 content is down to a minimum but compare the 64 with the Amiga. How does it weigh up? (Obvious).

"Now to that grump Nicholas 'Angry' Bronson, you're right that the magazine says Commodore AND Amiga, but remember it doesn't say Commodore AND C64. You're a minority in the world of computers.

"I own an A600HD and a C64 and I'm wondering if you've ever used a decent computer, because if you have then you'd realise why there's so much more Amiga content than C64."

OJ: I don't know about Nicholas, but I've used IBMs, Macs, Atari STs and, of course, Amigas all quite extensively, but I still have a lot of respect for the C64. Over the past ten years it's put more computers into homes than IBM or Apple could currently even hope to. Certainly, the C64 would appear to be on a downward slide, but there is still a great deal of enthusiasm for them amongst both die-hard fanatics and new owners.

As for being a minority, approximately 15 million C64s have been sold, and while I suspect many of these C64s now lie retired in backroom cupboards, it's still a lot more than the Amiga's three to four million. The simple fact is, there is now more activity in the Amiga market than the C64's, and after ten years that's hardly surprising.

That wraps up this edition of The C64 Column. As always, I'd love to hear from you. Send your comments, questions, suggestions and Hellos to The C64 Column, PO Box 288, Gladesville NSW 2111. I'll be back next month. ❑

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HOT PD

by Daniel Rutter

Plenty of new stuff this month - so much that my intro can only be about this long!

Spaceballs Demo

The Amiga took the mantle from the C64 as the spectacular demo machine of choice, and the output of Amiga coding groups in this department is unsurpassed. But demos often tend to be a bit samey, and coders frequently produce efforts which, while technically brilliant, aren't actually very interesting.

Every now and then, though, something quite different comes along, and it has in the form of the Spaceballs/Skid Row coproduction (according to their text, it was Skid Row who got rid of all the clumsy bits).

It's yet another techno dance music demo, but the graphic effects are quite new, using vectors and blur animation in ways nobody's tried before, with spectacular results.

It won't run on the A3000 but is fine on the A1200 and any 68000 machine - well worth a look!

PCRestore

More and more people are transferring files between IBM and Amiga computers - sounds, pictures, animations, desktop publishing files. If your file is less than 720k in size you don't have a problem - whack it on a 720k disk on the IBM and any one of several packages on the Amiga will be able to read it. If it's around twice the size you can usually archive it down to fit onto a 720k disk using LhA, ARJ or ZIP, all of which archives the Amiga can extract.

But if it's too big for that, and the Amiga in question doesn't have a HD disk drive - or if the file's too big even for 1.44Mb floppies - then you used to be stuck with null modem or standard modem links, which are slow, clumsy and often impossible, if you're a long way apart and one or both computers doesn't have a modem.

But have no fear - *PCRestore* is here! *PCRestore* is a nifty little Amiga program which will read backup disks created with the MS-DOS Backup program from v3.3 to v5 of MS-DOS. Backup isn't much use for its official task - DOS 6's version is much improved - but for this purpose it's perfect. And you were about to spend $800 on a Syquest cartridge drive!

SVXVOC

While we're on the subject of PC/Amiga interchange, *SVXVOC* is a suite of programs, two for the Amiga and one for the PC. You can only use them from the CLI, and they allow IBM users to convert Amiga samples to VOC format to play through SoundBlaster cards, and Amiga users to convert sounds either way. Only mono so far, but works fine.

TutStone (Digital Illusions)

AmiSOX

And while we're on the subject of sound conversion, *Amiga Sound Exchange* (SOX) 3.1 is out, and is winsomely described as "the Swiss Army knife of sound processing tools. It doesn't do anything very well, but sooner or later it comes in very handy." The documentation goes on "SOX is really only usable day-to-day if you hide the wacky options with one-line shell scripts." This is not too difficult, since reams of such scripts are included for AMigaDOS or CSh shells. This release understands "raw" files in various binary formats, Sound Blaster .VOC files, IRCAM SoundFile files, SUN Sparcstation .au files, mutant DEC .au files, Apple/SGI AIFF files, Macintosh HCOM files, Sounder files, and Soundtool (DOS) files. It will also do sample manipulation - echoes, filtering, vibrato, reversing and mixing. Small it is not, and Workbench users might as well forget it, but that aside it's an excellent package.

Digital Illusions

Another big and impressive package is this $US15 ShareWare offering, which is a sort of bonsai *Art Department Professional*. The freely distributable version is only the alpha version of the program and so is a pain to use, but it gives you the idea. This program will do all sorts of funky things to pictures - see the demo screenshots - but its biggest selling point is that you can use it to make animations, with any combination of effects applied frame by frame for some really amazing results.

It has some big drawbacks in this version - the file requester, for example, is the worst I have ever seen and it takes an inordinate time to save and load - but if you've got a meg or preferably more RAM and, for less painful operation, a hard drive, you might well find yourself spending the bucks for the newer version.

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TWC update

Transmit With Chat is a two-way send and chat package I talked about some time ago. It allows you and a friend to hook up via modem and send messages to each other while pumping files both ways at once, and works quite well.

The current version, 2.05, incorporates faster file writing, protocol improvements, greater stability, greatly smaller code and lots of other things. TWC may not be distributed for profit, so you'll only find it on bulletin boards and at user groups - not much of a handicap since the only people who want it will already have modems.

MAX's 1.53

I talked about *MAX's BBS*, the great PD bulletin board package that lets any Amiga owner set up their own BBS, a couple of months ago. So I shan't repeat myself, since naturally you all buy every issue of ACAR. The current version of *MAX*'s is 1.53, and adds a couple of bugfixes. If you're toying with the idea of starting a BBS, you could certainly do worse than check this package out - it's fully documented and quite widely used.

ARQ1.78

ARQ is one of those programs people see once and have to have. It replaces the fairly functional but dull AmigaDOS requesters - you know, "Please Insert Volume" and company - with much prettier centred requesters, which include better keyboard control and an individual animation for each type of requester, which plays away in a little box.

The current version has various bugfixes, a few new animations, better detection of the type of requester to make sure it gets the right animation, and several other minor improvements. Partly useful, partly frivolous, wholly desirable.

TUG

The month's dose of frivolity. TUG stands for Totally Useless Game. It's a rather funny text adventure game, not awfully well coded, which has you galloping around a house trying to find a way out. It comes with a text file which tells you how to finish, but it's recommended you don't read it unless you're SURE you're stuck. It gave me a few laughs.

CompDisk1.6

CompDisk is a WB2 only package for real time virtual partition disk compression - compressing data as it gets written to your hard disk (you can use it with floppy but I wouldn't if I were you) and decompressing it when it's read back. It works by making a giant file which the operating system thinks is a separate disk. This "disk" can be any size - you can have it exactly the size of a standard floppy if you like. If you're running a fast processor,

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CompDisk is a better package to use than the other virtual partition program, *FMSDisk*, because *FMSDisk* doesn't do compression. But if you're using 68000 *CompDisk* will be a glacial experience.

AutoRes

This weeny little program is designed to simultaneously run a program and make it resident, which is a bit simpler than residenting it and then running it separately. It's not actually hugely useful and only works under WB2, but since it's so small I put it on the companion disk.

MagicMenu

MagicMenu is a great little utility which makes Amiga menus pop up under the mouse cursor when you hit the button, gives them a nice three dimensional look and allows you to select from menus without holding the mouse buttons down, which is considerably more convenient.

It had three significant problems, though; it munched a few bytes of RAM every time you hit the right button and never gave them back, it crashed some programs (like, for example, the *KingFisher* Fish database), and it was documented in German.

Well, the docs are still incomprehensible (fortunately the program interface itself is in English so it's not too disturbing), but the other two bugs seem to be gone. Judging by the length of the History spiel some other improvements have been made too, but figuring out just what ain't easy. Still, it works fine and is a useful addition to your Amiga environment.

GIF Datatype

I mentioned the GIF and PCX datatypes, for WB3 users, last month; in the interim there's been a small update to the GIF one; since it's only a few kilobytes it's on the companion disks.

ARTM

Amiga Real Time Monitor is one of those diagnostic programs that you'll know if you need. It allows you to view and play with tasks, windows, libraries, devices, resources, ports, residents, interrupts, vectors, memory, mounts, assigns, locks, fonts, hardware and resident commands.

ARTM will, in essence, tell you anything you want to know about your Amiga, as well as letting you juggle task priorities and lots of other stuff. The current version is 1.71; the last few versions have removed many bugs and added a couple of minor features. ARTM may not be distributed for profit, so finding it is your problem.

Qmouse

Qmouse is a popular "everything utility" for Workbench 1.x users, and has been converted to WB2 by Dan Babcock. The last time I mentioned it was v2.1; in the meantime it's made it

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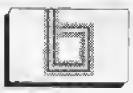

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to v2.5, which adds the usual piles of bugfixes as well as PopCLI optionally bringing the Workbench screen to the front, KS3 compatibility, Snap compatibility, auto window activation delay so 68000 machines don't fall asleep when you move the pointer over lots of windows and several other minor changes.

And it still has all its old features - mouse acceleration, mouse and screen blanking, click to front/back, SunMouse window activation, auto window activation after flicking screens, drive click disabling, #?/* toggling for CLI and the ability to completely disable DisplayBeep - the DOS function used by some programmers to make the user's life a misery with excessive screen flashes and audio effects. But you do need WB2 to run it.

TutPolis (Digital Illusions)

SuperDark

Just last month I mentioned *SuperDark*, a suite of screen blanking utilities not unlike *After Dark* on the Macintosh, only lumpier. Well, it's been greatly updated and is now considerably less likely to blank your screen to death, and so it's on the companion disk. Some new stuff has been added, a lot of bugs removed, but it's still not too quick on 68000. What do I care, I just got me an 030!

DelInfo

This simple little utility's sole aim in life is the removal of icon files (filename.info files) from anywhere you don't want them. The latest version, v1.1, adds a little and removes a couple of bugs. Tiny but useful.

DeliTracker

IntuiTracker is the old faithful program used by anybody who wants music while they compute - it'll play *SoundTracker* module on the workbench. *DeliTracker* does the same sort of thing, but with multi module format support and a different interface. There are a couple of formats that still baffle *DeliTracker*, but with both the *Deli* and *Intui* version you should be right. You can find the latest version of *IntuiTracker* on my HotPD 7 companion disk set.

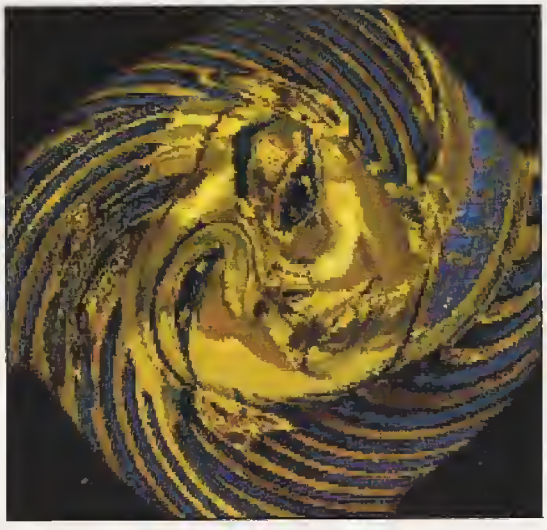
SysInfo

Sysinfo is one of those programs that gets updated every second day. The current version is 3.15, and fixes the clock detection bug. Minor, but it's on the companion disk.

Fish

Fred Fish's invaluable AmigaLibDisk series has now reached disk 820. Here are some highlights from the latest 10 disks:

TutTwist (Digital Illusions)



Disk 811 contains *bsh*, another monster shell cum scripting language like *Csh* and *Ksh*. *bsh* will run on DOS 1.x to 2.x, and offers command history, command line editing, command substitution, redirection and piping, redirection of standard error file, concurrent piping for external commands, here documents, aliases, filename completion using wildcards ('*', '?'), pattern permutations, variables, array variables, local and environment variables, variable exporting, C-like expression evaluation, conditionals, looping, more than 50 built in commands, more than 40 built in functions, script programming, workbench startup via newbsh, directory aliases, shell window manipulation and command search by CLI path, by bsh path variable, command hashing and resident command loading. Got that? Good. It's shareware.

Also on **disk 811** is *WhiteLion*, a new *Othello* (Reversi) playing program. As usual it beats the pants off me, but it's one of the best efforts in this field I've seen, and is a great program for learning the game. ShareWare.

Disk 813 has *AmigaBase1.21*, a hierarchical, programmable, in-core database that runs under OS 1.3 and OS 2.0. Features include two display methods, filter datasets, search datasets, print datasets, and much more. Datatypes can be Integer, Real, Boolean, String, Memo (Text), Date and Time. Number of datasets is only limited by available memory. Since it's programmable, you can build just about any kind of database with it, and some examples are included to start you off; it's great to see such quality software in the ShareWare market.

Disk 814 features *TreeGrow*, a pointless but fun program which generates quasi-fractal trees or plants. I like these sorts of programs - they're soothing, some-

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how. Hours of fun await, as you play with branches, leaves and flowers and discover that nobody with a machine slower than a 4000 should attempt a 20 generation plant.

Disk 815 contains *AntiCicloVir*, a link virus detector - link viruses infect files, not bootblocks - that detects 27 different viruses. Checks your disk and memory for known linkviruses, and can also detect some bootblock viruses in memory. Shareware.

Disk 817 has *EditKeys*, a keymap editor which supports editing of string, dead and modifiable keys, as well as control of repeatable and capsable status of each key. *EditKeys* runs equally well under AmigaDOS 1.3 or 2.0, and allows anybody to set up funny key macros, simple menu systems, or indeed to go all Dvorak should the urge strike them.

Disk 818 contains *LoadLibrary*, (yet) another LoadLib program, which allows you to load libraries from funny places without copying tons of seldom-used stuff into LIBS:, and also allows you to RELIABLY kick unused libraries out of RAM to free space. This version runs in its own task, and uses the reqtools.library for multiselection and other user friendly file handling. *LoadLibrary* requires WB2.

Also on **818** is *WatchStack*, a program that monitors the stack of any selected task or process 50 or 60 times per second and reports the allocated stack, maximum stack usage and current stack used. Requires WB2, and is another little help in tracking down those incompetently built programs that live to stuff up your system.

Disk 819 contains *MemoMaster*, a program that warns you about events (like birthdays and anniversaries) as they approach. Simple, eh!

Disk 820 has *QuickFile*, a shareware flexible, fast and easy to use flat file database using random access with intelligent buffering to minimise disk access, multiple indexes for fast access to records, form and list style screens and reports, and fast sorting and searching. Files are quickly and easily defined, and fields can be added, changed, or deleted at any time. If you don't need super power, *QuickFile* could be perfect for you.

IDIOT ALERT

That's right kids, another moron with a hex editor has released a fake "update" to a program. Poor old Eddy Carroll, author of the invaluable *SnoopDOS*, has once again had his work hijacked for some nong's entertainment - if you find something which purports to be *SnoopDOS 2.0*, ignore it. Nobody knows what THIS version does, but it isn't anything useful.

Everything mentioned here except *MAX*'s, the Fish disks and the stuff that can't be distributed for profit is on the companion disks, available from Prime Artifax PD as Hot PD 9a and 9b. The disks are fully iconned, except for programs that don't run from Workbench.

See you next month. ❑

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Phil Campbell's MEGA Entertainment

EA Releases A1200 Zool

The floodgates are opening as a new range of software designed specifically for the 256 colour Amiga 1200 pours onto the market ... well, not quite. But at least there's a trickle!

Electronic Arts are first, with a specially upgraded version of the phenomenal *Zool*, the best ever platforms-n-ladders game ever to grace the Amiga. I'm waiting for my turn on ACAR's Amiga 1200 to try it out!

Playcorp Takes Over Mindscape Distribution

Sydney's Mindscape, longtime supporters of ACAR with the monthly Mindscape competition, are to cease operation. Mindscape International and Software Toolworks products will now be distributed through Melbourne's diversified Playcorp organisation.

Playcorp spokesman Mr Sam Stewart, a keen Amiga enthusiast, promises solid Amiga support from the company. "We've already developed strong credentials in the console market," said Mr Stewart, "and intend to do the same in the computer arena." You can contact Playcorp on (03) 329 2999, or fax (03) 329 2995.

Mindscape's Sydney office will still be open for "technical and marketing solutions."

See you at the Show

Yes folks, it's just about World Of Commodore time again. We'll all be there on the ACAR stand ready to chat, and flogging off hurriedly made copies of the ever popular ACAR Entertainment Hints Disks. Mind you, if you'd like to beat the rush you can order yours right now - see the details below.

New Screenshot Technology for ACAR

Keen eyed readers will notice some improvements in our screenshots over the next few months. Thanks to Don Quixote Software, we're now using an Action Replay III cartridge to capture screens from "freezable" games - which includes all the titles reviewed this month. Many games, however, use fancy "copper-list" programming to create gleaming colour-barred backdrops. And sprites usually drop out of the captured screens. So from next month you'll notice live "video grabs" of game screens, courtesy of a VIDI 12 Frame Grabber from Mark King's Amadeus Computers, phone (02) 652 2712. Video grabs suffer from a little blur, but you should find they give a better overall view of the action.

King's Quest V Solution, see page 74

Last Ever Mindscape Competition Results

Sad to say, the Mindscape April Competition is our last! So here's to our final clever - and lucky - winners of *Nigel Mansell's Grand Prix*. We asked you to unscramble the words TTRPPIIEECA and UTTRPONMIEA. Each of them can form two perfectly normal English words. I suspect the winners had access to an Anagram dictionary, because they didn't seem to have much trouble coming up with peripatetic, precipitate, importunate, and permutation.

First prize goes to Joe Hanna-Rivero of Keilor Downs Vic, who had the good sense to notice the clue! Second prize to Jeannine Clegg Heathridge WA, and third to H Turnbull of Teralba NSW.

New ACAR Adventure Hint Disk

Speaking of Hints, Adventurer's Realm have now produced their very own disk full of hints and tips for Adventurers. You'll find the details safely tucked away in this month's Realm.

And the Ever Popular Hint Disks 1 and 2

If you still haven't ordered your copy of the fabulous ACAR Hint Disks 1 and 2, why not do it now? This month, we're offering a World Of Commodore Special - send two blank disks, a stamped, self addressed envelope, and a cheque for $8 to Phil Campbell, PO Box 23 Maclean NSW 2463, and we'll send you both disks crammed with hints, tips and other goodies. That's a huge 20% saving for this month only.

ENTERTAINMENT HINTS & TIPS

Gravity Force

These handy level codes come from Brendan Tregear.

Level 5 - AGNUS
Level 10- PARSEC
Level 15- CRYSTAL
Level 20- REACTOR
Level 25- VISION
Level 30- ORBIT
Level 35- PALACE
Level 40- ALIEN
Level 45- FALCON

Also if you want to get to any level, type in WARPXX where XX is the level number.

Zool

Thanks to Daniel Cannon for this handy *Zool* hint:

On the screen with the little Zool and the instruction to press the fire button, type GOLDFISH. Now in the game, press 1 for invincibility, 2 for next section, 3 for next world and 4 to lose a life.

Armour Geddon

Last month we printed Part 1 of Jim Darcy's detailed guide to totally stuffing up *Armour Geddon* with your Action Replay Cartridge. Here comes part 2!

Altering the Developed Status of a Vehicle or Weapon

Again, says Jim, you'll need to use the " M (address) " command to alter these locations. Alter the two bytes at each of these locations to $FFFC to make a vehicle or weapon developed.

Vehicle or Weapon	Status Location	*
Heavy Tanks	$02af0c	*
Light Tanks	$02af62	*
Hovercrafts	$02afb8	*
Bombers	$02b00e	*
Fighters	$02b064	*
Helicopters	$02b0ba	*
Lasers	$02b110	*
Bombs	$02b166	*
Rockets	$02b1bc	*
Missiles	$02b212	*
Neutron Bombs	$02b268	*
Retd. Bombs	$02b2be	*
Night Sights	$02b314	*
Shells	$02b36a	*
Drop Tanks	$02b3c0	*
Telepods	$02b416	*
Fuelpods	$02b46c	*
Cloakers	$02b4c2	*

The above locations are only for training mode off, as in training mode on the vehicles and weapons are all developed.

Infinite Vehicles and Weapons

The following instruction (located at $130b6) decrements your vehicles and weapons in the base.

$130b6 sub.w d0,1c(a0)

Disable this instruction, and every time you use a vehicle/weapon, you will still have the original number of vehicles/weapons remaining.

If you click on a vehicle/weapon, and then put it back, you will find that you now have an extra one. To disable this instruction, use the " A (address)" command, and assemble NOP instructions over the top of it.

eg. type " A $130b6 " (enter)

now type NOP (enter) - do this line twice to erase the old instruction. This is a little bit harder than using the trainer " TFD (address)" command, but it is so much quicker that it is worth the extra effort.

Entertainment Letters

Send your entertainment letters to the editor, Phil Campbell, PO Box 23 Maclean NSW 2463, Australia. Keep them brief and to the point, and we'll do our best to help.

Swap Shop

Dear Phil, I am after the game *Street Rod I* or *II*. I will swap it for *Turbo Trax, Warhead, Full Metal Planet, Nightdawn, Grand Monster Slam, Purple Saturn Day, Football Sim, Volleyball Sim* or the Power Pack. Thank you.

Andrew Politsch
Mount Isa, Qld

Ed: Hope you'll find a reader somewhere who can help. You'll enjoy *Street Rod* - it's a nice little racing game, though hard to survive in!

Complaints Department

Dear Phil, I am writing to warn people about the Sierra Club, run by Sega Ozisoft. It seems to be a fake. I've waited three months for a newsletter, and received nothing. I rang the hint line and found it was disconnected.

I would also like to complain about Prime Artifax. They are very slow in delivering. I ordered a catalogue from them two months ago and have still received nothing. I would also like AMOS programmers to write to me for I want to start an AMOS club. It will consist of disk costing around $5. This money will be distributed to the writers and so on. Keep up the good work.

Myle Agnew
50 Eugenie St
Raglan, NSW, 2795

Ed: Gee, Myle, you're having a bad run! Have you remembered to include your address when you've contacted Sega-Ozisoft and Prime Artifax? They're both highly reputable companies! If you still haven't had any success by the time you read this, contact our office by phone and we'll put in a good word for you with both companies. As for your Amos Club, are you sure you can offer anything more than the "official" Amos club run by Pactronics?

Sports Report

Dear Phil, I own an Amiga 500 and am heavily into sports sims. I was disappointed in *ET's Rugby League* in one aspect of the game. That was it doesn't have statistics like highest point scorer and such. Could they possibly do something in the future to enhance these features?

Harold Banfield
Sanctuary Point, NSW

Ed: Sorry, Mr Banfield, I think there's very little chance that *ET's Rugby League* will be re-released with a beefed up stats section. Nice to know that there are some players out there who take notice of all the statistical garbage that some sport sims like to pump out - as for me, I just ignore it!

Cheat

Dear Phil, I was hoping you could help me with some cheats for games - though not cartridge cheats, 'cause I haven't got one. I'm after some help with *Nuclear War, Ports of Call, Global Effect, Fire Power* and *Wings*. Thanks for the help.

P Kuhnast
Humpstead Gardens, SA

Ed: There's plenty of help available for most of those games on our official ACAR Hints Disks - *Ports of Call* and *Wings* have been particularly well covered. If you've got any back issues of ACAR, check them out - otherwise, see details for ordering hint disks on the News page.

Test Drive II Wanted

Dear Phil, Somehow I've trashed disk 1 of *Test Drive - The Duel*. Sega-Ozisoft can't replace it. I was wondering if any readers could provide me with the original disk, or a copy. I'm prepared to swap for an original *Jimmy White's Snooker* or *AMOS - The Creator*. If anyone can help, please contact me direct.

Mark Curran
5 Landra Ave
Mt Colah 2079
ph (02) 987 4606

Ed: Sorry to hear about your accidental disk-trashing, Mark. Hopefully some compassionate reader will get in touch with you direct!

Hall of Fame

Well, I was stoked off my dial to recieve a letter from the Ukraine. I don't know where he buys ACAR, but Segey Kandaurov sent me a heap of high scores for the C64. If you're reading this, thank you for the letter and the high scores!

If anybody else out there receives this magazine around the world, drop me line and tell me how things are going in your country.

As for other high scores, I'm searching for somebody who sent me nine high scores, with no name attached. Please drop me a line.

That wraps this section up for another month. See ya later, Australia!!!

Send your high scores to Juris Graney, 41 Cameron St, Maclean, NSW, 2463. Please mark clearly whether your scores are for C64 or Amiga. And remember - No cheat modes allowed!

AMIGA

ACTION FIGHTER 132,530 Robbie Baker
ALERT 359,700 Robbie Baker
ARKANOID 1,052,610 S Walter
AMAZED 130,500 C Turnadge
ANARCHY 545,560 - Sid Vicious
AQUATIC GAMES 4,170,666 - Phil Cary
AXEL'S MAGIC HAMMER 329,800 Aaron Buscumb
BAAL 134,250 Davo
BARBARIAN II 100% (c) - Sid Vicious
BATTLE COMMAND 334,200 Peter Cain
BATTLE SQUADRON 99,999,999 (c) Amos Burbidge
BEYOND ICE PAL. 67,625 (c) Chris Turnadge
BIO CHALLENGE 29,000 Aaron Sanderson
BLOCKOUT 85,281 Stephen Lark
BLUES BROTHERS (C) LOOPY
BOMBJACK 468,120 K Butters
BUBBLE + 276,850 (c) C Toyne
BUBBLE BOBBLE 2,960,980 Kristy Cameron
BUDOKAN 6:08min (c) Mark Sorensen
BUGGY BOY 113,260 Powerhouse Nick
CAR-VUP 484,122 Happy Hacker
CHASE HQ 7,426,060 Powerhouse Nick
CONT. CIRCUS 4,815,390 Oolly
CRAZY CARS 93,622,590(c) Robert Cameron
CRAZY CARS CHALL 3,000,000,000!! Michael Summers
CRYSTAL HAMMER 6,767,921(c) Kristy Cameron
CYBERBALL 475,000 D Marsh
DENARIS 53,900 Peter Evans
DIABLO 1,490 Timothy Johnson
DRAGON NINJA 406,400 (c) WIZE OWL
DOUBLE DRAGON 962,355 Robert Cameron
DOUBLE DRAGON II 201,330(c) The Warrior
EDD THE DUCK 5,820 Andrew Gormly
ELIMINATOR 246,570 G Munro
EMERALD MINE Level 23 (c) Timothy Johnson
FIRE & ICE 376,750 The Prophet
FINAL FIGHT (C) LOOPY
FLOOD 13,135 Matthew Beetson
GAUNTLET III 270,509 LOOPY
GEE BEE AIR RALLY 308,726 Robert Irwin
GIANA SISTRS 112,480 A Annen
GODS 13,501,379 (c) WIZE OWL
GOLDEN AXE 499.9(c) The Untouchable
HYBRIS 2,934,425 Andy Tyson
IK+ 1,039,200(c)Powerhouse Nick
IMPOSSIBLE MISSION 66,360 Diane Unwin
IMPOSSIBLE MISSION II 67,900(c) David Dilkas
INDIANA JONES L.C. completed Phillip Nicoll
INDIANAPOLIS 500 37.00sec/ 243.24mph Ian Klauss
INERTIA DRIVE 33,600(c) A. Gormly
JAMES POND 2,500,000 Mark Shillington
KARATE KID II 54,000 M Summers
KILLING GAME SHOW 699270 David Thompson
KLAX 4,396,040 Happy Hacker
LEATHERNECK 88,700 T Humphries
LIVE AND LET DIE 96,520 Merekee Beaton
MAJOR MOTION 50,658 Owen Webster
MENACE 996,481Kamikaze Andy
MIDNIGHT RESISTANCE 332,610 Chris McInally
MINDWALKER 306,214 P Schumacher
MOUSETRAP 71,977 Davo Rich
NARC 180,800 Damien Carsburg
NECRONOM 1,181,360 - Johnny Rotten
NINJA MISSION 66,528 Chris Toyne
NITRO 283,000 Brett Bannerman
NUCLEAR WAR 990 Paul Rucci
N. Z. STORY 546,695 E Beaton
ONSLAUGHT 39,918 A Gormly
OPERATION THUNDERBOLT 166,400 Andrew Gormly
OPERATION WOLF 355,680 Graham Wilson
OUTRUN 59,180,659(c) Wize Owl
OFFSHORE WARRIOR 526,345 Jacob Booth
PACMANIA 3,250,140(c)Amos Burbidge
PINBALL DREAMS 464,580,351 The Fly
PINBALL MAGIC 423,560 P Rucci
PINBALL WIZARD 3,893,570 Stephen Hose
PIONEER PLAGUE 35,412 K Scoby
PLUTOS 299,000 Davo
POPULOUS 347,990 M Summers
PORTS OF CALL $3,654,944,000 Status 1033 Troy Clarke
POW 612,865 David Thompson
RAINBOW ISLANDS 9,999,999 (c) Timothy Johnson
RAMPAGE 212,912 G Wilson
RICK DANGEROUS II 68,450 Scott Southurst
ROBOCOP 450,890 (c) Wize Owl
ROTOX 183,050(c) Faye Doherty
SIDEWINDER 904,350 Sharon Elsley-Eades
SILKWORM (Heli) 9,963,360 (c) Robert Cameron
SILKWORM (Jeep) 2,369,571 Kristy Cameron
SKWEEK 3,375,400 Faye Doherty
SPACE ACE 24,680 Stare Bear
SPACE HARRIER 210,855,250 Maverick
SPEEDBALL 17,650 A Burbidge
SPEEDBALL 2 488-0 Matt James
STARWARS 5,722,822 wave 33 C. Mingos
STRIDER 175,350 Neil Young
SUPER CARS 27 races (c) L.Hetherington
SUPER CARS II Hard Level '42' The Untouchable
SUPER HANG-ON 25,042,850 David Worthy
SUPER OFF-ROAD $4,930,000 Greg Hingerty
SUPER WONDER-BOY 208,900 Adam Annen
SUPER SPACE INVADERS 814,355 Andrew Hay
SWIV(H) 2,108,210(c)R Adams
SWIV (J) 2,417,330 S McKinley
SWORD OF SODAN 403,500 Steven Begley
TEEN.M.N.TURTLES 546,600(c)James Laeken
TEENAGE QUEEN - $3900 (c) Ronald Biggs
TERMINATOR II 254,960 P Rucci
TEST DV 237,308 S Demchinsky
TEST DRIVE 2 559,992 Michael Summers
TETRIS 65,300 (1417 Lines) Ray 'THE LEGEND' Brown
TETRIX Level 232 Stephen Lark
THE RUNNING MAN 123,500 Daniel Rucci
THUNDERBLADE 2,034,040 De Moose
THUNDRCT 522,300 S Southurst
TOWER OF BABEL 25,934 (c)Stephen Lark
TOKI 115,963 (C) Loopy
TURBO OUTRUN 100,260,819 Matthew Manlle
TURRICAN 1,735,100 (c) Adrian Jenkin
TURRICAN II 3,307,700 (c) Matthew Beetson
TV-SPORTS BASKETBALL 192-39 Matt James
TV-SPORTS FOOTBALL 189-0 David McKinney
TWINWORLD 24,640 Carol Love
TYPHOON 54,255 O Webster
U.N.SQUADRON 762,255 (c) Tony Stojanouski
VIDED KID 371,050 Andrew Hay
VIRUS 22,637 Jason Dykstra
WHIRLIGIG 28,210 Nathan Allen
WINGS 432 kills Robert Irwin
WINGS OF DEATH 56,670 R Irwin
WONDER BOY 381,186,042(c) Kristy Cameron
XENON II 1,107,280 Mark Porta
ZOOM 67,051 Steve Jones

COMMODORE 64

ALLEY CAT 1,101,150 S Mitchell
ALTERED BEAST 312,400 Rick Zanker
ARKANOID 1,730,400 Segey Kandaurov
ARKANOID 2 756,250 Mean Max
BARBARIAN II 80500 UNKNOWN
BATMAN 521,360 The Joker
BATMAN-THE MOVIE 1,087,080 Michael Bradley
BANGKOK KNIGHTS 39,600 Josh Smith
BOMB JACK 521,820 A Wade
BUBBLE BOBBLE 6,963,930 (c) David Gavrilovic
BUGGY BOY 182,790 P Murray
CABAL 194,450 The Joker
CHASE HQ 12,436,129(c) David "Moira Jane" Sanna
CHASE HQ II 29,100 (C) A Wade
CREATURES 10,123 Adam Malinowski
DAVID'S MID MAGIC 669,150 The Joker
DOUBLE DRAGON 35,820 (c) Atul Prasad
DOUBLE DRAGON II 255,190 Nick van Heeswyk
DRAGON BREED 496,870 Happy Hacker
FAST BREAK 136 to 9 C Byrne
GHOSTS AND GOBLINS 325,600 Adam Wade
GHOULS AND GHOSTS 558,110 (c) Adam Wade
GIANA SISTERS 287,100(c) Adam Wade
GRYZOR 228,600 Mean Max
H MARADONA Lv M N Heeswyk
HAWKEYE 260,400 M Inman
IKARI WARRIORS 308,300 Jason Aldridge
IMPOSSIBLE MISSION II 76975
INT. KARATE 139,300 P Millward
LAST NINJA II 17m44s D Carter
MIDNIGHT RESISTANCE 28,540 (c) Dennis Pike
MEGA GIANNA SISTERS 328,746 Mean Max
NEMESIS 1,633,200 Adam Wade
OPERATION THUNDERBOLT 78,600 Adam Annen
OPERATION WOLF 776,350 Winston Diaz
OUTRUN 19,952,780(c) The Untouchable
PARADROID 303,125 M Inman
PAPERBOY 103,100 J Nunes
PIRATES 143/100 D Steward
POWERDRIFT 872,940 A Annen
QUE-DEX 639 Chris Byrne
R-TYPE 1,890,210 Atul Prasad
RAINBOW ISLANDS 7,653,241 Adam Malinowski
RAMPAGE 180,000 Adam Wade
RICK DANGEROUS 66,280 Adam Annen
ROBOCOP 237,170(c) A Wade
ROLLING THUNDER 417,280 Adam Wade
SALAMANDR 235,300 P Millward
SHINOBI 664,372(c) W Diaz
SILKWORM (Heli) 1,212,200 (c) Rick Zanker
SILKWORM (Jeep) 244,500 (c) Adam Blanch
SKATE OR DIE Freestyle 22,850 The Joker
STREET FIGHTER(c) 168,900 Adam Wade
SUPER CYCLE 239,840 (c) Adam Annen
TARGET RENEGADE 330,450 C. Byrne (clocked)
TEST DRIVE 36,144(c) John Nunes
TEST DRIVE II 249,543 (c) A Batroc
TETRIS 81,613 (1021) The Fly
THE TRAIN 9,500(c) Adam Annen
THUNDERBLADE 1,851,040 Matthew Inman
THUNDERCATS 310,100 Sergey Kandaurov
T.M.N TURTLES 4397 Adam Annen
TRAZ 112,400 Segey Kandaurov
TURRICAN 1,239,040 Adam Malinowski
UNTOUCHABLES 70,230 Simon Watford
WIZBALL 999,999 (c) G. Beaven
WONDERBOY 4,775,470 (c) Lee Walters

Scores followed by (c) indicate that the game has been completed.

KGB

So comrade, you want to know about an adventure game based in the Soviet Union, where you are an agent for the KGB? Let me tighten those thumbscrews as Laetone Gravolin investigates.

We all know times have changed. *KGB* intimidation is a thing of the past. But in KGB - the game - you play the role of Captain Maksim Mikhallovich Rukov (whew!), an agent who has just transferred from a military post in Siberia to Department P, a high-up section of the KGB in Moscow. His mission; to investigate cases of corruption inside the KGB itself.

Control is by a easy point and click interface - for instance if you put the pointer on a man the pointer icon will change to "talk". Click on the mouse button and a number of options will appear - "you say", "you ask about", "you talk about", "you ask for." Submenus let you choose your conversation topics from further options. Controlling objects on the screen is easier - if you point it at an object "take" will appear. One further click picks it up.

Gameplay is average - you go on a series of secret missions, through four chapters. The extent of the mission depends on the threat to the KGB. Put simply, if it affects the KGB the mission will be long and hard - if the outcome doesn't affect the KGB the mission will be short and easy. In general, you'll investigate deaths, apartments and other "James Bond" style stuff.

Of course the Soviet Union is very strict, if you go on a mission and find nothing the Major will transfer you back to Siberia in a very rude manner. And if you happen to accidentally pull your revolver out and aim it at the Colonel, it will be the end of the game. And your life.

In the headquarters, you have a very cramped office with a scrappy old type writer to write reports. There's a phone, and across the room the desks of the other agents you share the space with. Be careful what you say to them - in the KGB, everyone is always watching everyone else!

The graphics of this game are very good indeed. When someone talks to you, you will see a large animated picture of their face, which looks almost real. The sound is a little disappointing - a boring music track that seems to drag on and on. There are no sound effects at all!

If you feel you're not very good at this sort of game, don't worry. There's a very useful and unique backtrack mode! So if you get your ribs broken by a bunch of mean punks, backtrack to where you met them and say "You look very stunning, gentlemen" instead of "Why don't you take a walk, Mac."

FACTBOX

KGB is a well produced game with nice graphics, and a boring, Russian sounding music track. It's a classic point and click adventure, with plenty of depth, and a demanding plotline. Recommended if you feel like a challenge.

Ratings

Graphics:	90%
Sound:	67%
Gameplay:	85%
Overall:	83%

Distributed by Sega-Ozisoft. RRP $49.95. Available from your retailer.

In your inventory there are useful items like your revolver, identification card, money and a family photo - and as you progress on missions you will find more items that help.

KGB is a difficult game. It expects you to be a professional when you start, and you'll have to think hard. If there are bad guys in the next room and you have to search the room next door and it's dark, remember to use a match instead of turning on the light - in other words, think like a spy!

This means the game can be darned frustrating at times. Depending on how you look at it, that may be a bonus - after all, you don't want to finish it in the first five minutes. Then again, I guess you DO want to finish it some time in the next five years. I'll let you know how I go!

Mark Harris checks out a game that's finally been re-released without those nasty bugs. So switch on your imagination and dive in boots and all, because you're sure to enjoy ...

FATE

Gates of Dawn

The delectable mix of atmosphere, storyline, battles (some epic) and presentation make this game a classic of classics which continues to fascinate me each time I play it. The player obtains important information during game play only by engaging the inhabitants and Mages in conversation. In time, he encounters numerous puzzles which must be solved.

Fate does not employ the often abused question and answer trick - each puzzle must be solved step by step before a new adventure can begin.

Winwood, the main character in *Fate*, is a man in the best years of his life and a proud owner of a record shop on Fifth Street. He is not well off, so has to stay open late hours. One day he feels tired and falls asleep. Winwood was in dreamland; suddenly he is drawn into a world of dark nightmares and sucked into gaping emptiness. He awakes to find himself in another land. In his dream he sees Thardan, and knows he was the evil mage that abducted him. Winwood just has to find answers to these questions if he wants to return to his own world. And he is very sure he wants to return!

So the stage is set for this epic adventure (with emphasis on epic). This game was released in 1991 but was beset with problems (crashing when entering the first town); a year later it was released again minus the initial problems.

The first thing that impressed me was that the game ships on only two disks and is hard drive installable. Don't be fooled by the fact it is only a two disk game - it's crunched. I started playing it and am still playing it some months after receiving my copy. The interface is great, a combination of mouse and keyboard. The graphics are also excellent and this game was first released on the Amiga instead of the other way around (a big hurrah for the European software companies).

This is a true role-playing game, unlike some that have been dished up in the past. The experienced role-player will find this game to be truly exciting - it will certainly challenge your mind. Inventory management is a factor in this game, to be a true role-player you have to account for this (object weight, weapon weight etc) - after all you can't aspire to play be a role-player if you don't pay attention to detail.

The magic is broken up into 20 classes, each with 10 spells. Every mage can learn all the classes and spells. Attributes can be raised upon promotion along with the acquisition of new spells.

FACTBOX

Fate - Gates of Dawn is a classic Role Playing Game that has finally been released the way it always should have been. And what a game! Great graphics and a top notch story line in the best RPG traditions make it our reviewer's favourite game.

Ratings

Graphics	91%
Gameplay	95%
Playability	93%
Lastability	93%
Overall	94%

Distributed by Playcorp (03) 329 2999.

Almost every town has a dungeon of seven levels with sub levels which are an extension of each level: each floor has to be completely explored as they hold clues, and useful weapons can be found. The first object of this game is to open the cave-train and this is achieved by killing Miras Athran.

Enough of the clues, in closing I will say this - I have found and continue to find great enjoyment in this game and if you are dwelling on the fringe of becoming a role-player take up the challenge and play *Fate*, you will not be disappointed. I would never give a game 100% but *Fate* has come the closest to my perfect score!

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LOTS OF BARGAINS!

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Phil Campbell checks out a game based on the work of a world class artist. If you like tons of atmosphere and mood, look no further than ...

DARKSEED™

Picture a babe with milky eyes and an aquiline nose. And sensuous lips. And a neat set of purple tattoos entwined with the sculptured snake that crawls from her forehead towards the bridge of her nose. Dendritic ridges of sculptured skin on her flanged cheeks complete the effect nicely. This dame is the stuff nightmares are made of - and she's staring at me from the three dimensional boxlid of *Darkseed*, a unique computer game inspired by the artwork of Swiss surrealist H.R. Giger.

Giger's airbrushed masterpieces have inspired movie blockbusters like *Alien*, *Alien III* and *Poltergeist II*. With a style that's been labelled "biomechanical", Giger likes to explore the synthesis of organism and mechanism - the hybridisation of man and machine. It's striking stuff, and not what you'd call pretty. More like haunting, like the babe on the box with the nasty nose-job. The fact is, she makes Michael Jackson look ... normal.

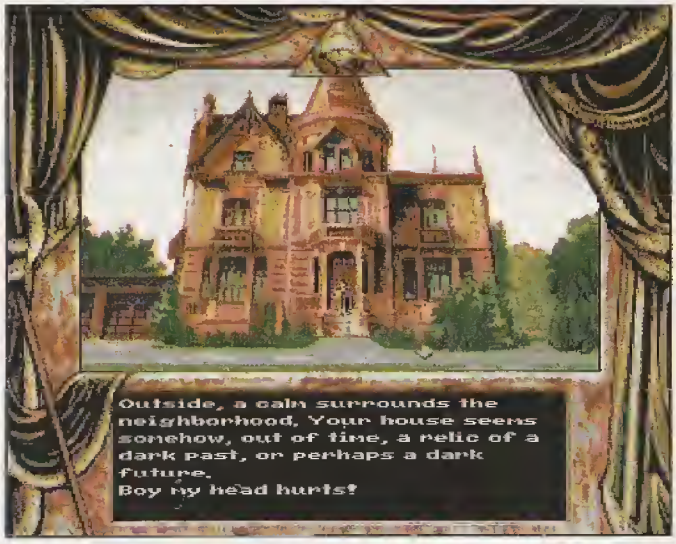
In *Darkseed*, I'm Mike Dawson, a science fiction writer who has just purchased a run-down Victorian mansion. It was one of those impulse buys - I needed somewhere quiet to work on my new book, and it was a bargain. So I snapped it up before I even looked it over.

I arrived last night, and immediately came down with a headache. I slept fitfully, disturbed by a series of horrifying nightmares. And now it's morning. My head is still thudding. There's a whistling sound in my ears, and the ticking of the grandfather clock on the landing is oppressive. Other than that, I'm fine.

So let's have a look around. The peeling wallpaper speaks of better days, as do the ornate drapes. Two doors lead out of the bedroom; one to the landing, the other to the bathroom. I take a quick shower, then head downstairs.

The doorbell rings - it's the postman, with a parcel. Strange. Nobody knows I'm here. Inside, there's a lifelike China doll ... as I look at it, my head swims, and the doll is transformed into one of the hideous creatures from my dream. Mmmm. You don't have to be Einstein to see there's something a bit odd going on! But what?

The fact is, Mike's house just happens to lie on a faultline between two worlds - and as you play *Darkseed*, you hold the fate of both of them in your hands. Your first task is to find your way into the Giger-inspired DarkWorld - and apart from the occasional weirdo doll and the odd dream sequence, it's not exactly easy.



FACTBOX

Darkseed is a top notch product that redefines the state of the art in Amiga animated adventuring. Graphics are ornately detailed, sound is moody, and the gameplay should keep you guessing.

Ratings

Graphics	89%
Sound	81%
Gameplay	87%
Overall	87%

Distributed by Ozisoft (02) 317 0000. RRP $89.95. Available from your retailer.

So far, I've investigated the house and found two secret rooms, I've wandered into the village, bought a bottle of cheap scotch, met my neighbour Delwyn, and borrowed a book from the library. It's all good fun, with top class graphics, an excellent and moody soundtrack, and suitably obscure clues. Things are gradually falling into place - I've found one secret passage way in the house, but I still haven't found the cosmic portal that I'm looking for.

From the outset, it's perfectly obvious that *Darkseed* is a very classy game. Giger's graphics have been used extensively in the title sequence, and they'll re-appear later in the game. The more mundane "real" world graphics are a treat too; highly detailed, and - in the house at least - architecturally ornate.

The character animation is great, with every movement based on digitised video footage. "Mike" is a real person - a living, breathing, walking and talking testimony to the power of interlaced Amiga graphics. If you're still running an Amiga 500 or an A2000 without a flicker fixer, you may find the high-res jitter a little offputting - Amiga 1200 users will have no problems.

For a guy with no table manners, and terrible taste in music, Stuart Elflett is remarkably civilized. Well, he is now, anyway, because he's been checking out the latest world-sim ...

Just where do you begin with a game as good as *Civilization*? This game is truly monumental - I've never been as impressed with a game as much as I am with *Civilization* - it's THAT good! Somehow it makes any other simulation seem like it's just a game - *Civilization* is real. If *Railroad Tycoon* was out of this world, *Civilization* leaves the galaxy!

Okay, I'll try and calm down a little, and give you some idea of what it's all about, and why you owe it to yourself to experience the game firsthand.

Civilization goes where no game has really managed to go before, from the dawn of our world, into the not so distant future the game simulates the development and evolution of the entire human race. It takes the concept of *Simcity*, and magnifies it to a global scale, incorporating the need for an effective system of trade and travel - yes, railroads. Why settle for building and running one city or railroad when you can control both across the entire planet ... and the future of its population?

You start with just one lonely group of settlers of your chosen nationality from which you will build a civilization that will grow to cover the planet, or as much of it as you can subdue. For out there beyond the frontiers of your settlement, in those black undiscovered parts of your map there are other civilizations, growing, developing and most importantly, expanding.

As the years pass and your population's strength and wisdom grows, you must defend yourselves against invaders and venture forth to conquer. You also have the option to make peace or offer alliances. Destruction of other civilizations makes for great sport but you must remember your dwindling treasury and the need for trade routes.

To add to the game's wide array of goals you must also prepare for the great space race and colonization of far away planets (free from pollution and global warming). If you think colonizing far flung star systems is too complicated, you could simply try to conquer the whole planet ... or maybe just surviving is enough of a challenge?

The methods used to control your population in *Civilization* are very easily learned and understood. What really made the game for me was the constant need for input into the control and progress of the game.

Civilization operates on a system of game turns, each task to be performed takes a certain length of time or number of game turns. For instance, a group of settlers travelling on foot can only travel one square each game turn whereas a horse drawn chariot may move three. Each active unit under your control waits for instructions each and every game turn. Gone are the long periods of time watching or monitoring growth, with *Civilization* you are in control every step of the way! You control what your people build, where they go, who they fight with and how happy they are (which is of vital importance). In fact, you control everything they do for 6000 years.

There are more options and choices available to you than any other game I can think of - I've even stopped playing *Railroad Tycoon* (another excellent Sid Meier game that was previously a pretty serious addiction) in favour of *Civilization*.

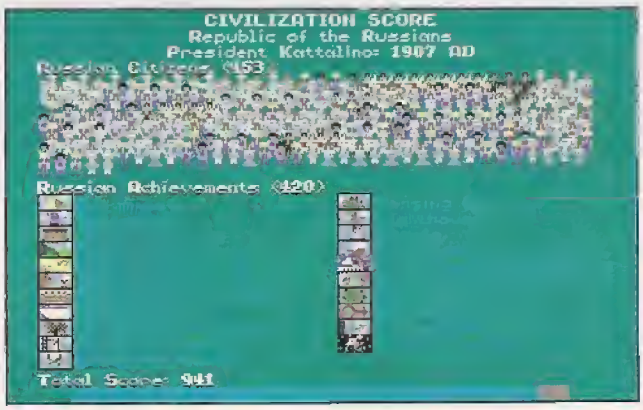
FACTBOX

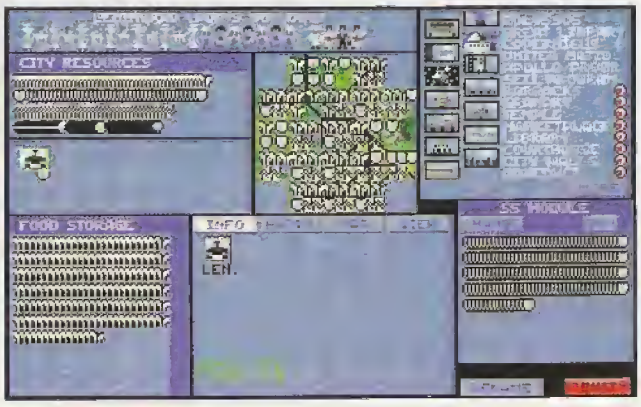
Civilization is a remarkably thorough and well equipped "god-game," with almost infinite play options. If you liked *SimCity* or *Railroad Tycoon*, this game is for you. The elementary graphics and sound don't seem to detract from the top-notch gameplay at all!

Ratings

Graphics	69%
Sound	68%
Gameplay	94%
Overall	89%

Distributed by Sega Ozisoft. RRP $79.95.





If I had to choose just one piece of software to take to an Amiga equipped desert island, it would be *Civilization*, without a doubt - there are so many options and variations that it would last forever. Everything can be customized, even down to a replica Earth.

You can choose from multiple different races and the number of opposing civilizations. Every game is different and will require fine tuning of your strategy to be beaten.

The manual is very thorough, giving all details concerning the game in a clear, easily readable manner. In fact, much of the information in the manual is available on-line, as you play, from the extremely complete "Civil-o-pedia", a disk based encyclopedia that can be accessed by a click of the mouse, giving instant information about hundreds of topics relating to the game.

An on-line help mode is available, supplying advice from a number of advisors, who will provide what they believe (based upon your government type) to be the best choice available to you. Use of this feature allows you to jump straight into the game, with only minimal amounts of reference to the manual.

Civilization even comes complete with an auto-save option, which saves the game every fifty turns, eliminating the annoyance factor if your local electricity company does the dirty on you - also saving concentrated sessions of hair pulling when you realise that your chosen strategy is just not working! Mention should be made of *Compute's Official Guide to Sid Meier's Civilization*, a book which is not just a play to win guide but provides many in-depth details of various features of the game ... which will be invaluable to most players.

Civilization manages to combine all the best features of all the other simulations and God games around - it's got the lot. The graphics are a little simple, but they very clearly indicate all the information that you need - this is life, not some flashy arcade game in deep space.

If you've enjoyed *Sim City, Railroad Tycoon, Ports of Call, Populous* or any of their ilk, then you deserve *Civilization*. It's an essential part of any Try-hard god's software collection! So what are you waiting for - go get it now.

King's Quest V Solution Part One

Tearing your hair out? Frothing at the mouth because you can't crack King's Quest V - Absence Makes the Heart Go Yonder? Don't despair! Role Playing Expert Mark Harris is here to take you by the hand and lead you through step by step.

Part 1 - Sorcerer's House and the Prince

Welcome to *King's Quest V*. Stick with my instructions line by line and I'll walk you right through the game. But one word of advice - only read this if you're desperate. Otherwise you'll miss the fun of working things out for yourself!

Walk one South, then one West from the Sorcerer's House. Talk to the Prince, then go one South and one East to town.

In town, walk up to the man fixing the wagon and talk to him. Then enter the tailor shop. Return to the street. Take the coin (near the wagon). Look in the barrel and take the fish. Walk to the Bakery (one west of Town). Enter and buy a pie. Walk to the Beehive (two west).

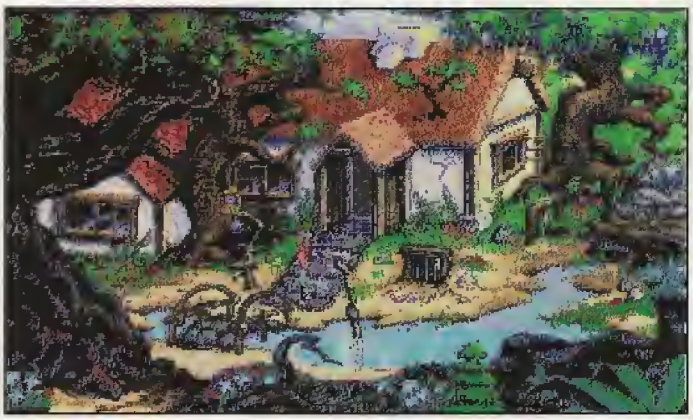
When you get to the Beehive, throw fish to the bear and walk to the tree. Take the honeycomb, then take the stick and walk to the anthill (one north). At the anthill, throw the stick at the dog, then walk to the inn (one south then two east).

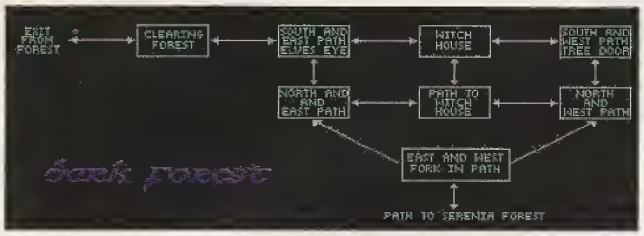
Walk to the haystack on the west side of the inn and search it. The ants will come and help. Take the golden needle and walk to the beehive.

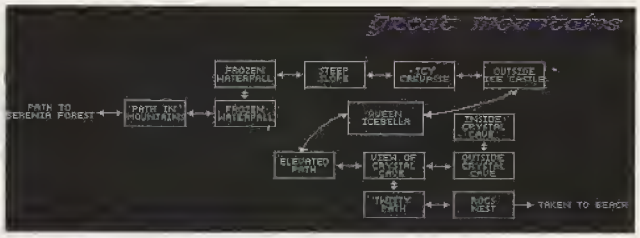
Part 2 - In the Desert

From the beehive, walk five locations west. Drink. (Save at each oasis in case you get lost). Walk to the shoe (two west and one south). Take the shoe and walk three west. Drink some water and then walk two east and three north. Drink more water. Hide behind rocks, (trial and error to find right location to hide) and watch how the bandits enter the Temple. Walk three south and two west. Drink more water and walk three south and one west to the Bandit Camp.

At the Bandit Camp, drink some more water. What? You feel like a camel already? Tough - drink it anyway! Enter the right side of the small tent avoiding the sleeping bandit and take his staff. Leave the tent and walk one east and three north, drink again, then walk three north and two east, drink, and then walk one north to Temple (Save the game). Use staff to enter the Temple.







Part 3 - The Temple

In the temple, ignore the treasure and look next to the door. Quickly take the bottle and coin, then leave temple and walk one south and drink again. Walk east eight screens to the Gypsy.

Walk up to the man and give him the golden coin, then enter the wagon. Get the amulet and leave the wagon. Go to the Warning Sign (two east). Wearing the amulet, walk north, then west, to top of that screen, and then walk east to Dark Forest. Then walk north to the Witch's House.

Outside the house, give the brass bottle to the Witch. Enter house. Open the trunk on the north wall and take the spinning wheel. Look at the light and take the key. Open the drawer on the west wall and take the pouch. Open the pouch to get the emeralds. Leave the house and go east once to the the tree with the door.

Now use the key to open the door, get the heart and then walk two west to the Elves.

Throw your emerald on the ground. Use honeycomb to make a sticky spot on the ground. Now throw another emerald on the ground. Throw another emerald on the ground (near the honey) and the Elf will get caught. Talk to the Elf, then follow him. Walk into the Elf hole. You're now in the Elf Tunnels.

Take the shoes, and enter the tunnel on the east wall. (This will return you to the Warning Sign). Walk to the tree with the harp. Give the heart to the tree and get the harp. Walk two west to the gypsy.

When the gypsies have gone, take the tambourine and walk to the gnome (one south and one east). Give him the spinning wheel and take the marionette, then walk one south and one east to the Bakery.

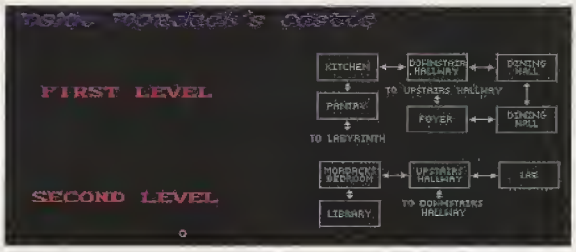
Stand to the east of the bakery and wait for the cat to chase the rat. When it does, throw the shoe (from the desert) at the cat. Walk to town.

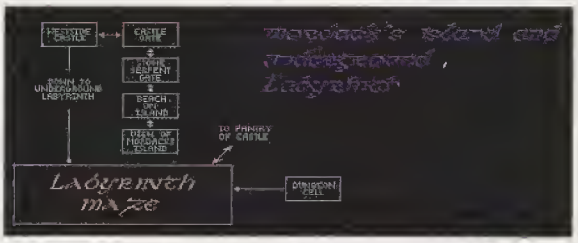
In town, go to the Tailor Shop. Give the golden needle to the man and get the cloak. Leave the tailor shop and go to the toy store. Give the marionette to the man and get the sled. Leave the toy store and go to the cobbler.

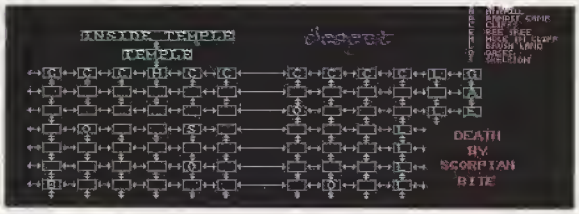
Give the elf shoes to the man and get the hammer. Leave the cobbler and go two west to the inn.

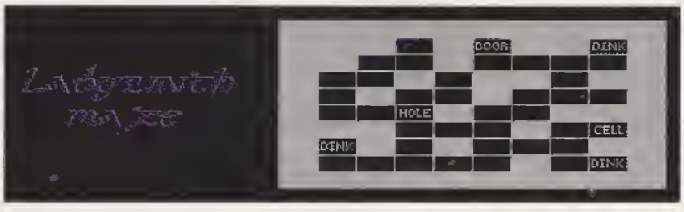
Enter the inn and walk up to the man - you'll be thrown into the cellar. Don't fret! The rat chews the ropes. Now take the rope and walk to the door. Use the hammer to open the door. Open the door to the kitchen. Open the door to the cabinet on the north wall and take the lamb. Exit through the west door and walk one north and two east to the snake. Use the tambourine to scare the snake. Walk up the mountain path, and save your game.

Keep trying from here, and I'll be back next month with the rest of the solution.









MICHAEL SPITERI'S Adventurer's Realm

Greetings once again! If you didn't know already, this is the part of the magazine for adventurers, role-players, and wargamers. In fact, if strategy, adventure and mystery is your thing then you have come to the right place.

Those who are currently at the brink of jumping (from a cliff) because of an adventure problem - don't take that final step yet! You can write to one of the Clever Contacts that are distributed across the nation or you can drop a line to Kerrie in the Free Hint Sheet department. If all that fails, send your problem to me and we'll take it from there!

Of course, smarty pants game players are also welcome here. If you can help out with specific hints and tips or even general help, drop a line in to the Realm.

Finally, gossip, rumours, whinges, and just general chat regarding adventure and roleplaying games are also welcome here - and don't forget to take advantage of our free classifieds!

The address to write to for stuff on adventure games is: Adventurer's Realm, 12 Bridle Place, Pakenham Vic 3810.

Kamikaze Andy lives in his Dungeon and will cater for all your roleplaying game problems (but not hint sheets!). His address is: Realm's Dungeon, PO Box 1083, Canning Vale WA 6155.

Always enclose a stamped addressed envelope when writing to any address printed in this article - especially if a reply is needed.

Realm's Official Adventure Solutions Disk

Just send a $5 cheque payable to Michael Spiteri and enclose a blank disk and a stamped, self addressed envelope, and I'll send you out the first Official Solutions Disk containing solutions and hints for 89 games! The disk was put together by Graeme Beaven and contains help for a huge range of adventure and roleplaying games.

Remember, you must enclose a stamped addressed envelope and a disk - and send it to Realm's 1st Hint Disk, 12 Bridle Place, Pakenham, Vic 3810. Or, pick one up at the World of Commodore Show in Darling Harbour!

Realm's Super Duper Hint Books

I have some good news and some bad news (depending on how you look at it). The first *Adventurers' Realm Hint Book* is gone - every single copy, sold out. However, we still have a good pile left of the second *Adventurers' Realm Hint Book*, and if all of these go, then we might be tempted to go for the third!

Though what a bargain! I mean, ten dollars won't even get you a decent (ahem) McDonalds meal, but if you send ten smackers to 21 Darley Rd, Randwick, NSW 2031 you will receive a hint book packed with hints for over 25 adventure and roleplaying games, as well as pages upon pages of handy adventure mapping sheets. Ring Darrien on (02) 398 5111 for more information.

World of Commodore 1993

Okay adventurers, this is one event that should not be missed. Adventurers' Realm will be there with heaps of hints sheets to give away. As well as that, I'll be signing up new Clever Contacts and you'll have what could be your last chance to pick up the *Second Adventurers Realm Hint Book* at a show stopping price. So be at Darling Harbour between July 2nd and 4th, okay?

Free Hint Sheets

Kerrie, the Lady of the Realm, is currently digging! What does she dig, man? Well, she digs all the mail she gets every month asking for free hint sheets, and I mean that literally! However, Kerrie is particularly excited this month as a new hint sheet rolls off the press. Thanks to Noel McAskill, we now have a combined *Mortville Manor/ Maupiti Island* hint sheet. Now those frustrated Jerome Lange lookalikes can sigh with relief as their cases open up!

If you would like some of our free hint sheets, just send a stamped addressed envelope plus a list of four hint sheets from the list below to: Kerrie's Free Hint Sheets, 12 Bridle Place, Pakenham Vic 3810

The list now looks like this: *Mortville Manor/Maupiti Island, Monkey Island 1, Monkey Island 2, Space Quest 3, Space Quest 4, Wonderland, Larry 3, Champions of Krynn, Kings Quest 5, Pool of Radiance, Zak McKracken, Zork 1, Zork 2, Zork 3, Bards Tale 1, Bards Tale 2, Bards Tale 3, Hitchhikers' Guide to the Galaxy, Guild of Thieves, Jinxter, Pawn, Corruption, Faery Tale*, and the 1993 Clever Contacts Listing.

Realm's Trading Post

Shane Robertson of 14 Sonoma Road, Budgewoi, NSW 2262 has several games to sell (mostly adventure games) for the Commodore 64. All vary from $5 to $30 and all are original. Write to Shane for a complete list if you are interested.

Glen Christie of 7 Eric Street, Blackwood, SA 5051 has a big range of C64 Infocom adventure games for sale. You can ring him on (08) 370 2027, or contact him by mail.

Ashley Bryant of 11 Raingill Avenue, Warrnambool, Victoria 3280 has two great C64 roleplaying games - *Pool of Radiance* and *Hillsfar*, for $25 each or $40 the two.

Jonathon Groves of 1 Herring Court, Sorrento, WA 6020 has quite a big range of Amiga games for sale, including *Conquests of Camelot, Double Dragon 1, 2, 3, California Games, Winter Games, Stunt Car Race, Spy vs Spy, Kick Off, Super league Soccer, Afterburner, Operation Wolf, Operation Thunderbolt, Arthur*, and *Quest for Excalibur*.

This is probably the only time you'll see Bill Fife's name in the Realm. That's because he's not really a true adventurer but somehow inherited some adventure games from his brother in law (who must have been an adventure freako). Anyway, enough of the small talk, Bill has *The Black Cauldron, Sherlock & The Riddle of the Crown Jewels, Defender of the Crown, Kings Quest I* to *III, Shadowgate* and *Monkey Island 1*. All of these games are for the Amiga and you can contact Bill at 21 Lyton Street, Blacktown, NSW 2148 or you can ring him on (02) 622 8354. Bill wants some good Amiga platform or car racing games (hohum) in exchange for these top titles.

Matt Armstrong of 11 Harcombe St, Bell Post Hill, Geelong, Vic 3215 has *The Hunt for Red October* for the Amiga for only $15, and has some AMOS demos that he's written for only $1 (which gets you eight demo games but you have to supply a disk). Matt is after some good AMOS games and also some *Zorks*.

Terry Baker of 3/5-13 Dellwood Street, Bankstown NSW 2200, or (02) 790 5374, has *Eye of the Beholder I, Secret of Silver Blades, Pools of Darkness* and *Gateway to Savage Frontier*. These are $20 each, or $25 with clue book. That's not all. Terry also has *Mega Traveller 1, Populous, Castles, Floor 13, Medieval Warriors, Battle Isle, Spoils of War, Sports Pack* (featuring *Jack Nicholas Golf, Cycles, TV Sports Football & Basketball*), and *Games Pack* (featuring *Wings, Lemmings, Pro Tour Tennis*, and *Shadow of the Beast*). Terry wants $20 for the games and $30 for the packs, or will swap for *Larry 1, Battletech, Monkey Island 1*, or a decent cricket game.

Tim Wilson of 16 Riatta Court, Rye, Vic 3941 has *Black Crypt* and *Chaos Strikes Back* for the Amiga, and he'd like to swap them for *Buck Rogers*, or any RPG except for those D&D ones set in Krynn and the Forgotten Realms.

Greg Bell of 12 Greenhill Ave, Figtree, NSW 2525 is searching high and low for *Maniac Mansion, Zak McKracken*, and *Search for the King*.

If you'd like to swap, sell or search for any type of game, send the details to Realms Trading Post, 12 Bridle Place, Pakenham, Vic 3810. Any pirated software will not be advertised.

Clever Contacts

New Clever Contact is Shaun Hately of 45 Moreton St, Frankston North, Vic 3200. He can help in *Bard's Tale III, Death Knights of Krynn, Secret of Silver Blades, Police Quest 1, 2, 3, Ultima 6, 7, Kings Quest 1, Eye of the Beholder 1, 2, Champions of Krynn, Pool of Radiance, Curse of Azure Bonds,Bards Tale 1 & 2*.

Also new is Daniel Cannon, 13 Tamworth St, Dubbo, NSW 2830. He can help out in *Monkey Island 1, 2, Zool, Dream Zone, Rocket Ranger, Colorado, Garfield, Hook*, and *Zak McKracken*.

Shane Robertson of 14 Sonoma Rd, Budgewoi, NSW 2262 wants to update his Clever Contact listing to now include: *Miser, Lost in the Amazon, Apache Gold, Castle Adventure, Castle of Mydor, Lost City, Hitchhikers Guide, Harboro, Gypsum Caves, Guild of Thieves, Dog Star Adventure, Critical Mass, Corruption, Cavern of Riches*, and *Castle Quest*.

Matt Armstrong (Realm Trading Post for address) updates his listing, now to include *Omnicron Conspiracy, Space Quest 5, Indy & Fate of Atlantis, Rise of the Dragon*, and *Heart of China*.

Many thanks to all the Clever Contacts for doing such a great job, and don't forget, prospective Clever Contacts, you can sign up at the World of Commodore show in Darling Harbour.

Wayne Forbes, one of our new Kiwi readers, is stuck in *Personal Knightmare*. He appears to have problems trying to get into Ivy Cottage. The problem is that he always gets garroted from behind. Any takers?

Stephen Treloar from Frankston in Victoria is stuck in *Indy 4*. He is at the stage where Indy is faced with a set of skulls. He has to push certain skulls to open the door. This problem sounds familiar. Can anyone shine some light on the situation?

Heather Sneddon from Warilla in NSW is stuck in a game called *Little Puff in Dragonland*. Finding the final piece of a ticket is what is troubling Heather.

Shane Robertson is stuck in an oldie called *The Detective Game*. He doesn't know how to locate the secret passages which are on the plans of the castle and he can't avoid being shot at 11:06pm. Sounds like someone's got a bounty on you, Shane.

Matt Armstrong asks if it is possible to get the end door open (which is situated in the tunnel in the Robot Factory on Planet Cron) in the game *Omnicorn Conspiracy*. Is there any use at all for the coords of where the space ship was attacked? Also, Matt asks, what does he do at the asteroid that's been sold. When he walks outside, he suffocates!

Adventure Chat

The Jerome Lange saga continues! I recently received a letter from Katie Hollins from Lankhor in France. It appears Lankhor are looking for a new Australian distributor for their great games. Hopefully we will have found one for them by the time you read this. I'm in the process of trying to line up an exclusive Australian preview of the next Jerome Lange adventure, *Sukiya* (set in Japan), however read on for details of a new Lankhor adventure called *Black Sect*. Meanwhile, send away for Noel McAskill's new *Mortville Manor/Maupiti Island* hint sheet.

Glen Christie of Blackwood in SA is searching everywhere for *Lost Treasures of Infocom II* and *Return to Zork*. Can anyone point him in the right direction? At time of writing, *Return to Zork* was still in the works and was due for release later in the year.

Tim Wilson of Rye in Vic has a few comments to make: "In the March issue I gave a hint to Aaron Danks about *Police Quest III*. The hint was supposed to be for *SimCity*. Also, why can't those adventure program companies make games with the choice to use point'n'click or type in commands. Why don't they mix them together?"

Mike: It appears the gremlins got into the March issue. Tim's *SimCity* tip was to press shift and type FUND to get extra money. It appears any company that releases any form of text based adventure game is considered 'brave'! Legend (led by ex-Infocom members) release all their PC games with a combined interface of point'n'click and type in commands, but that's about it!

Matt Armstrong of Geelong in Vic writes: "I would like to know when *Space Quest 5* is coming out for the Amiga. I'm a *Space Quest* fan and I hope the rumour about Sierra dropping the Amiga is a fat ugly lie."

Mike: Well, Sierra haven't released a major Amiga title in quite a while, however don't lose hope. I read somewhere that Sierra are committed to supporting the Amiga 1200, so expect *Space Quest 5* for that machine.

By the way, I have played the game on a PC. It is quite hilarious, however has a horrible habit of killing the player more frequently than desired.

Matt also has some news regarding where you can buy *Indy & The Fate of Atlantis*. He suggests paying a visit to Maxwell's Computer Centre in Nicholson St, Abbotsford, Vic.

Greg Bell of Figtree, NSW writes: "I have noticed how games don't stick around for very long. If you have a look around you'll notice that games like *Monkey Island 1, Maniac Mansion,* and even *Space Quest 4* are getting really hard to get. Once an adventure game is released, a month later it is off the shelves and along comes a new game. As you should have noticed, the *Zork* series are long gone and are nearly impossible to buy."

Mike: Thanks for your views, Greg. Software companies keep producing the same games as long as there is a demand for them. It would be impossible for a retailer to stock every game released, and the quality of some of the new releases will usually ensure that the older ones will not sell. You should still be able to find older games at reduced prices are in the form of games packs.

I don't think *Zork* is a good example, because it was available for over ten years! It is still available on Infocom's adventure packs. I think that titles stay around for much longer than a month, more like three months.

Realm Exclusive Preview - Lankhor's Hot New Adventure:

Adventurer's Realm recently received, from France, exclusive information and screen shots of the soon to be released Lankhor adventure, Black Sect. From the makers of *Mortville Manor* and *Maupiti Island* comes this new adventure set in the depths of the Yorkshire Moors in England. A mysterious Black Sect has infested the region, and it is your job to get vengeance for the death of your Grandfather (killed by the sect) and relieve the local village of this dreaded group.

This game features animated graphics to depict 34 locations and the various characters who live within them. The main plus of the game is apparently the atmosphere created by the superb soundtrack and sound effects, combined with greatly improved graphics.

Black Sect

Both *Mortville Manor* and *Maupiti Island* have won awards across Europe, and if these are any indication, *Black Sect* should be a must-buy. It is due for release on the Amiga next month, with a PC version following in September. Meanwhile, enjoy the screen shots of this new game.

Help, Help & more Help or the Smart Adventurers Dept.

Game: Curse of Enchantia
To: David Marjanovic (April Issue)
From: Matt Armstrong and Graeme Beaven.

Help: To cross the second cavern in Enchantia, press buttons 1, 2 and 4 (Graeme's hint). There might be a rock above the chasm which you need to make fall. You should have a hat which catches rocks. Wear it and walk under some rocks, then throw a small rock at a big rock above the chasm (Matt's hint):

Game: Monkey Island 2
To: Daniel Cannon (April Issue)
From: Matt Armstrong and Graeme Beavan

Help: Fill the balloon and gloves with helium then use the lift and make a voodoo doll. Visit the voodoo lady before opening the coffin in the crypt. Use JoJo the monkey on the pump. Take the lens from the model lighthouse in the Phatt island library and give it to Wally (Graeme's hint). In easy mode, underground in Dinky Island you need to make a voodoo doll of LeChuck. You'll need beard bits, underwear, doll, skull, offer the white hanky. Put everything in the JuJu bag and use the syringe in the medical room as a pin.

Game: Hook
To: David Marjanovic (April Issue)
From: Graeme Beavan and Daniel Cannon.

Help: The money is in the pots on Hook's ship. Use it to buy the magnet. Don't worry too much about Tinkerbell.

Game: Codename Iceman
For: Stuart George (January Issue)
From: Graeme Beavan

Help: In the machinery room, push the button, get and inspect the diver, examine vibration, check and measure shaft, put washer and nut on shaft, tighten nut, climb up and open the door.

Game: Ultima 5
For: Simon Vaughan (Feb issue)
From: Graeme Beavan

Help: The amulet will reveal the entrance to the Dragon Doom on the dark underground island. The Sandalwod box will not open - you give it to Lord British to end the game. The Mystic Weapons are found in the lava below Hythloth. They are not essential in completing the game.

Game: Zombie
For: James Allen (March Issue)
From: Graeme Beavan

Help: Get the keys in the security room to open the fourth floor where the trunk keys are located. Get the rope in the sports store and use it on the balcony. Get the fuse, gloves, torch and gun then repair the fuse in the basement. Now the computer will activate the lights.

Game: Space Quest IV
For: Greg Ball (April Issue)
From: Matt Armstrong

Help: All you need is the matches. Get back to the time pod and type the co-ords in to get back to Space Quest XII. (You should have got the co-ords when you first entered the timepod near the start of the game).

Computer Adventure Games - Hints & Tips

The Second Adventurers Realm Hint Book

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The Dungeon by Kamikaze Andy

Well, the Dungeon is back after a period of noticeable absence. Just as Lord British mysteriously disappeared after the discovery of a huge cavern underneath the lands of Britannia in *Ultima V*, history repeated itself!

This time it was the legendary Kamikaze "I'll NEVER get lost in a dungeon" Andy who ... em ...: got hopelessly lost. Suitably chastened, Andy has vowed to stock up on Extra-Power Duracell light spells instead of the usual Swap Meet stuff he picks up at the local medieval faire ...

While he has been "away", the Dungeon's administrative goblins have been hard at work trying to come up with brand new ideas to reshape the outlook and the style of this column. However, as goblins aren't exactly known for their intellectual prowess (in other words, there are more brain cells in a 50 cent coin than in a collective of these critters), it took the return of Kamikaze Andy before things finally began to sort themselves out. Thank heavens for that "Undo" spell ...

(Note: Regular readers of the Dungeon will probably be aware by now that this month's column is one of those "weird, commentary, retrospective pieces that Andy often comes up with when he's had one too many of Iolo's home made brews").

Anyway, what I planned to do this month was to cast a "View the Future" spell, and describe some of the changes that the Dungeon will undergo during the next few episodes.

In the past, the Dungeon has served in quite a few roles, from regular news broadcaster to hint oracle to controversy corner. The new philosophy, as drawn up and blood stamped by those who still have red blood after years in this dark damp place, will be different, but hopefully not too radically different! (No, we won't be covering arcade games yet.)

"View of the Future"

Firstly, starting in a few months' time, there will be an increased emphasis in the latest Role-Playing and Adventure games, both for Amiga and PC (after all, the Commodore family does include those PC-Compatibles that help balance the books). This means more news, mainly due to greater direct access to US software publishers (who continue to be the dominant RPG and Adventure softcos).

Once we have established secure links with the US side, the growing UK RPG software publishing scene will be targetted. As is the case in the real world today, a lot of this information will be geared towards the MS-DOS platform, but the Dungeon will use all form necessary to obtain details of Amiga conversions and projects.

There will also be more "special reports", which hopefully will include coverage of the internal workings of a typical software publisher such as Origin or SSI, and maybe one or two interviews with some of the major figures in the scene. There are also plans to cover the slow but sure rise of CD-ROM RPGs/Adventures as the market continues to develop. These are the next generation of computer entertainment - ultra realistic monsters and dungeons that could lose Kamikaze Andy forever ...

In terms of the hint oracle function of the Dungeon, the goblins in residence have decided that this is one area which will be given less emphasis in the future. The reasons for this are simple: the number of clever contacts in the Realm has grown large enough to handle the questions of stuck adventurers, and the hint sheets that are freely available from the Magic Xerox Maker also help in this purpose.

The Dungeon will try to come up with a few more hint sheets specifically for Role Playing games, as well as a general guideline to successfully playing and conquering RPGs once the Dungeon Electronic All-Knowing Database (DEAD) recovers from the last staff party (yep, DEAD is DEAD right now).

One thing that must be remembered: the Dungeon is only one arm of the all encompassing Adventurer's Realm, and thus some of these planned changes will take time to actually appear. It's going to be a mighty job to squeeze all that information into approximately one page every month, but then that's what the adventurer is used to - challenge! And yes, the goblins have promised to keep careful track of where I wander off to next time. I think they must have tampered with my geo-positionary indicator ... that's the last time I use modern technology instead of the tried and true "drop one item in every square" method when I try to get out of a maze.

Okay Goblins - get back to work. I can always replace you with Orcs - same level of intelligence, but they work for fewer gold pieces.

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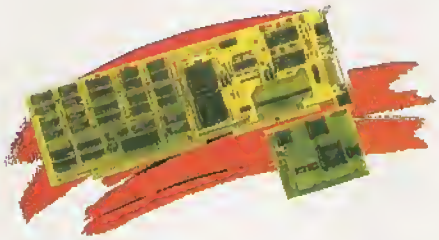

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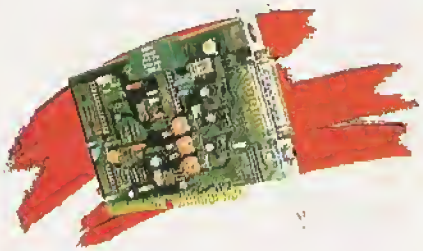

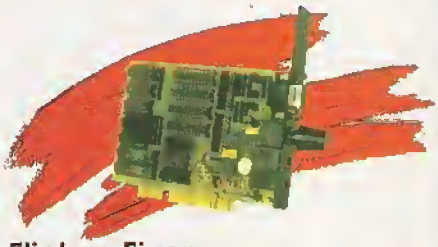

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